DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
450 110th Ave NE
BELLEVUE, WA 98009-9012

DETERMINATION OF NON-SIGNIFICANCE

PROPONENT: Stephen Noeske, City of Bellevue Utilities

LOCATION OF PROPOSAL: 13440 Main Street

DESCRIPTION OF PROPOSAL: Stream restoration, fish passage, and stabilization improvements to the stream banks of Kelsey Creek within the Glendale Country Club golf course.

FILE NUMBERS: 18-117648-LO **PLANNER:** Reilly Pittman

The Environmental Coordinator of the City of Bellevue has determined that this proposal does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(C). This decision was made after the Bellevue Environmental Coordinator reviewed the completed environmental checklist and information filed with the Land Use Division of the Development Services Department. This information is available to the public on request.

☐ There is no comment period for this DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's office by 5:00 p.m. on ________________.

☒ This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's Office by 5 p.m. on **12/27/2018**

☐ This DNS is issued under WAC 197-11-340(2) and is subject to a 14-day comment period from the date below. Comments must be submitted by 5 p.m. on _______. This DNS is also subject to appeal. A written appeal must be filed in the City Clerk's Office by 5:00 p.m. on ________________.

This DNS may be withdrawn at any time if the proposal is modified so as to have significant adverse environmental impacts; if there is significant new information indicating a proposals probable significant adverse environmental impacts (unless a non-exempt license has been issued if the proposal is a private project): or if the DNS was procured by misrepresentation or lack of material disclosure.

Reid M. Brennan for
Environmental Coordinator
Carol V. Helland

__**12/13/2018**________
Date

OTHERS TO RECEIVE THIS DOCUMENT:

☒ State Department of Fish and Wildlife / Stewart.Reinbold@dfw.gov; Christa.Heller@dfw.wa.gov;
☒ State Department of Ecology, Shoreline Planner N.W. Region / Jobu461@ecy.wa.gov; sepaunit@ecy.wa.gov
☒ Army Corps of Engineers Susan.M.Powell@nws02.usace.army.mil
☒ Attorney General ecyolyef@atg.wa.gov
☒ Muckleshoot Indian Tribe Karen.Walter@muckleshoot.nsn.us; Fisheries.fileroom@muckleshoot.nsn.us

City of Bellevue
Development Services Department
Land Use Staff Report

Proposal Name:	Kelsey Creek at Glendale Passage Restoration and Stabilization
Proposal Address:	13440 Main St
Proposal Description:	Land Use review of a Critical Areas Land Use Permit for the City of Bellevue Utilities Department to make stream restoration, fish passage, and stabilization improvements to the stream banks of Kelsey Creek within the Glendale Country Club golf course.
File Number:	18-117648-LO
Applicant:	Stephen Noeske, COB Utilities
Decisions Included:	Critical Areas Land Use Permit (Process II. 20.30P)
Planner:	Reilly Pittman, Land Use Planner
State Environmental Policy Act Threshold Determination:	**Determination of Non-Significance** Carol V. Helland, Environmental Coordinator Development Services Department
Director's Decision:	**Approval with Conditions** Michael A. Brennan, Director Development Services Department By: _____ Elizabeth Stead, Land Use Director

Application Date:	July 5, 2018
Notice of Application Publication:	August 2, 2018
Decision Publication Date:	December 13, 2018
Appeal Deadline:	December 27, 2018

For information on how to appeal a proposal, visit Development Services Center at City Hall or call (425) 452-6800. Comments on State Environmental Policy Act (SEPA) Determinations can be made with or without appealing the proposal within the noted comment period for a SEPA Determination. Appeal of the Decision must be received in the City's Clerk's Office by 5 PM on the date noted for appeal of the decision.

CONTENTS

Project File Items Referenced in this Report

1. Project Plans
2. Critical Areas and Environmental Studies, Memos, Reports, and Information
3. Monitoring Plan
4. Comments and Responses to Muckleshoot Tribe

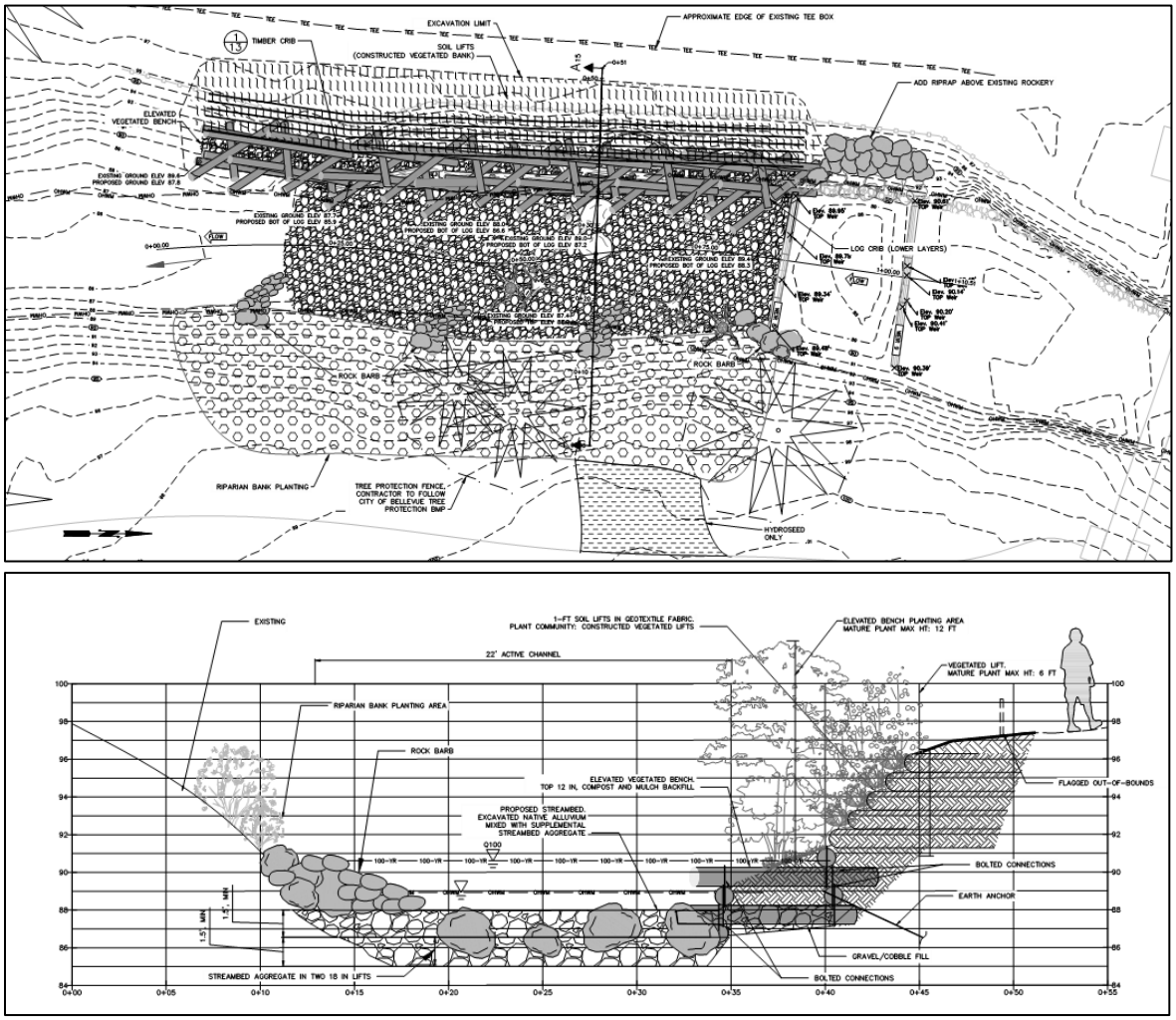
I. Proposal Description

The purpose of this project is to build on prior fish habitat improvements by performing stream maintenance and stabilization in a reach of Kelsey Creek adjacent to the Glendale County Club golf course. This portion of Kelsey Creek was previously the site of fish habitat improvements performed in the 1990s and in 2013. Since the 2013 improvements, fish-passage issues have developed that include jump height exceedance, weir issues, high velocities, and bank and bed erosion. To restore and improve fish passage this application proposes to:

- Restore City-installed weir structures to compliance with RCW 77.55 and restore fish passage at weir locations
- Reduce channel and bank erosion and sediment transport by constructing wood and rock structures that mimic natural features as well as engineered crib walls and rockeries to protect the toe-of-slope.
- Retain in-channel hydraulic diversity

See figure 1 for example stream improvements and stabilization.

Figure 1



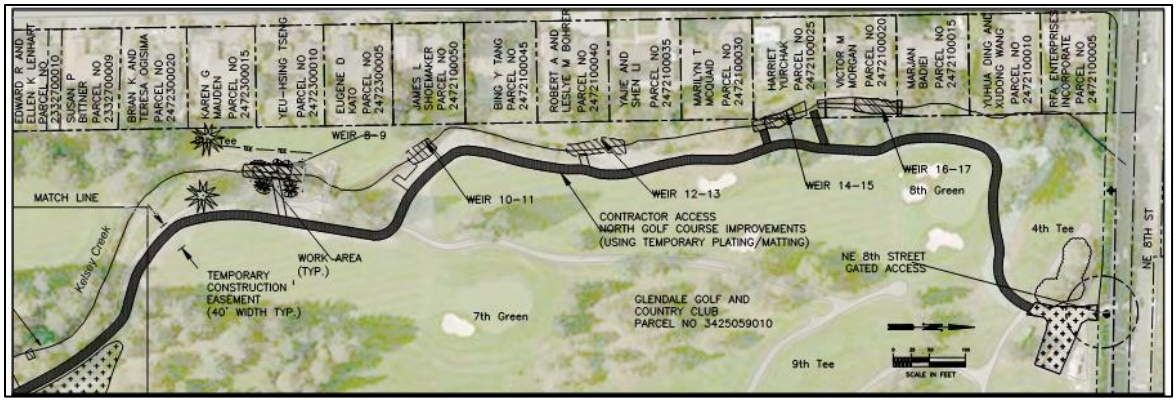
Any project that proposes disturbance within critical areas and associated buffers requires approval of a Critical Areas Land Use Permit. This specific proposal is associated with a prior approval for habitat improvement and stabilization which are allowed uses in the Land Use Code 20.25H.055, subject to certain performance standards discussed in this report.

II. Site Description, Zoning, Land Use and Critical Areas

A. Site Description

The project is located in Kelsey Creek within the Glendale Country Club golf course. Adjacent to the west are properties developed with single family residences and the entire area is zoned residential. Kelsey Creek is a Type-F stream that has a 100-year floodplain. The proposed work is below the top-of-bank and will be in the stream and floodplain. The existing weirs in the stream were installed in the 1990s by the City to control sedimentation and prevent fish stranding at the Kelsey Creek Farm wetlands downstream of the site. These weirs and the stream were improved in 2013 as part of a larger improvement project for Kelsey Creek that addressed 2.3 miles of the stream from I-405 to NE 8th Street. The work for this project extends south from NE 8th Street to the 6th green of the golf course. See Figure 2 below for current project location and work areas.

Figure 2



B. Zoning

The subject site is zoned R-1 and surrounding properties are zoned single-family residential of differing densities. The proposal does not affect zoning or change the use of the site as a golf course.

C. Land Use Context

The site has a Comprehensive Plan designation of SF-L which is Single-Family Low Density. The proposal maintains and enhances the park use by improving a trail crossing of Kelsey Creek and restores the stream channel.

D. Critical Areas Function and Value, Regulations

i. Streams and Riparian Areas

Most of the elements necessary for a healthy aquatic environment rely on processes sustained by dynamic interaction between the stream and the adjacent riparian area (Naiman et al., 1992). Riparian vegetation in floodplains and along stream banks provides a buffer to help mitigate the impacts of urbanization (Finkenbine et al., 2000 in Bolton and Shellberg, 2001). Riparian areas support healthy stream conditions.

Riparian vegetation, particularly forested riparian areas, affect water temperature by providing shade to reduce solar exposure and regulate high ambient air temperatures, slowing or preventing increases in water temperature (Brazier and Brown, 1973; Corbett and Lynch, 1985).

Upland and wetland riparian areas retain sediments, nutrients, pesticides, pathogens, and other pollutants that may be present in runoff, protecting water quality in streams (Ecology, 2001; City of Portland 2001). The roots of riparian plants also hold soil and prevent erosion and sedimentation that may affect spawning success or other behaviors, such as feeding.

Both upland and wetland riparian areas reduce the effects of flood flows. Riparian

areas and wetlands reduce and desynchronize peak crests and flow rates of floods (Novitzki, 1979; Verry and Boelter, 1979 in Mitsch and Gosselink, 1993). Upland and wetland areas can infiltrate floodflows, which in turn, are released to the stream as baseflow

Stream riparian areas, or buffers, can be a significant factor in determining the quality of wildlife habitat. For example, buffers comprised of native vegetation with multi-canopy structure, snags, and down logs provide habitat for the greatest range of wildlife species (McMillan, 2000). Vegetated riparian areas also provide a source of large woody debris that helps create and maintain diverse in-stream habitat, as well as create woody debris jams that store sediments and moderate flood velocities.

Sparsely vegetated or vegetated buffers with non-native species may not perform the needed functions of stream buffers. In cases where the buffer is not well vegetated, it is necessary to either increase the buffer width or require that the standard buffer width be restored or revegetated (May 2003). Until the newly planted buffer is established the near-term goals for buffer functions may not be attained.

Riparian areas often have shallow groundwater tables, as well as areas where groundwater and surface waters interact. Groundwater flows out of riparian wetlands, seeps, and springs to support stream baseflows. Surface water that flows into riparian areas during floods or as direct precipitation infiltrates into groundwater in riparian areas and is stored for later discharge to the stream (Ecology, 2001; City of Portland, 2001).

ii. Floodplain

The value of floodplains can be described in terms of both the hydrologic and ecological functions that they provide. Flooding of occurs when either runoff exceeds the capacity of rivers and streams to convey water within their banks, or when engineered stormwater systems become overwhelmed. Studies have linked urbanization with increased peak discharge and channel degradation (Dunne and Leopold 1978; Booth and Jackson 1997; Konrad 2000). Floodplains diminish the effects of urbanization by temporarily storing water and mediating flow to downstream reaches. The capacity of a floodplain to buffer upstream fluctuations in discharge may vary according to valley confinement, gradient, local relief, and flow resistance provided by vegetation. Development within the floodplain can dramatically affect the storage capacity of a floodplain, impact the hydrologic regime of a basin and present a risk to public health and safety and to property and infrastructure.

III. Consistency with Code Requirements:

A. Zoning District Dimensional Requirements LUC 20.20.010:

This is a proposal to improve fish passage and habitat within Kelsey Creek and provide bank stabilization. The project will not be constructing any structures or appurtenances that are regulated by the City of Bellevue Land Use Code dimensional requirements described in LUC 20.20.010. The project complies with the standards of LUC 20.20.010.

B. Critical Areas Requirements LUC 20.25H:

The City of Bellevue Land Use Code Critical Areas Overlay District (LUC 20.25H) establishes standards and procedures that apply to construction of improvements on any site which contains in whole or in part any portion designated as critical area or critical area buffer. The proposed habitat improvement and stabilization are allowed uses per LUC 20.25H.055 and subject to the performance standards as follows.

i. Consistency with LUC 20.25H.055.C.3.j

Disturbance and clearing and grading are allowed in the critical area or critical area buffer for habitat improvement projects demonstrating an improvement to function and values of a critical area or critical area buffer.

The proposed project has demonstrated a functional improvement to functions and values to the stream resulting from fish habitat and passage improvements. The project is also sponsored by the City of Bellevue Utilities Department, which is a public agency. The applicant's consultant prepared critical areas reports, memos, and studies which are in the project file and are reference document 2 of this report. These documents adequately demonstrate the project will have an improvement to the function and values of the stream.

ii. Consistency with LUC 20.25H.055.C.3.m

Proposed stabilization measures within a critical area or critical area buffer to protect against streambank erosion or steep slopes or landslide hazards may be approved in accordance with this subsection.

a. When Allowed. New or enlarged stabilization measures shall be allowed only to protect existing primary structures and infrastructure, or in connection with uses and development allowed pursuant to subsection B of this section. Stabilization measures shall be allowed only where avoidance measures are not technically feasible.

This proposal will repair existing rockery walls at two weir locations and add a combination of rock and wood structures anchored to the streambank to allow for planting. The proposed stabilization cannot be avoided as it is needed to address prior approved work in the stream that has been monitored since work was completed in 2013. The proposed stabilization is to repair and augment existing stabilization or

respond to changes in the stream that resulted from prior stabilization.

b. Type of Stabilization Measure Used. Where a stabilization measure is allowed, soft stabilization measures shall be used, unless the applicant demonstrates that soft stabilization measures are not technically feasible. An applicant asserting that soft stabilization measures are not technically feasible shall provide the information relating to each of the factors set forth in this section for a determination of technical feasibility by the Director. Only after a determination that soft stabilization measures are not technically feasible shall hard stabilization measures be permitted. The determination of whether a technique or stabilization measure is "technically feasible" shall be made by the Director as part of the decision on the underlying permit after consideration of a report prepared by a qualified professional addressing the following factors:

1. **Site conditions, including topography and the location of the primary structure in relation to the critical area;**
2. **The location of existing infrastructure necessary to support the proposed measure or technique;**
3. **The level of risk to the primary structure or infrastructure presented by erosion or slope failure and ability of the proposed measure to mitigate that risk;**
4. **Whether the cost of avoiding disturbance of the critical area or critical area buffer is substantially disproportionate as compared to the environmental impact of proposed disturbance, including any continued impacts on functions and values over time; and**
5. **The ability of both permanent and temporary disturbance to be mitigated**

The proposed stabilization is soft stabilization that uses bioengineering techniques. The only hard stabilization proposed is to repair existing structures, to restore their approved function and intent. All disturbance resulting from construction is proposed to be restored and 7,270 square feet of stream bank will be planted with native plants per the submitted plans and critical areas reports found in the project file and referenced in this report as document 1 and 2. Permanent impacts are proposed but are related to restoring fish passage which is a benefit that does not require mitigation. **See Conditions of Approval in Section X of this report.**

iii. Consistency with LUC 20.25H.080

Development on sites with a type S or F stream or associated critical area buffer shall incorporate the following performance standards in design of the development, as applicable

1. **Lights shall be directed away from the stream.**

   No lighting is proposed.

2. **Activity that generates noise such as parking lots, generators, and residential uses, shall be located away from the stream, or any noise shall be minimized through use of design and insulation techniques.**

   Construction noise will be temporary, and no long-term noise will be generated by the proposal. The project will be required to meet construction noise requirements in BCC 9.18. **See Section X for a related condition of approval.**

3. **Toxic runoff from new impervious area shall be routed away from the stream.**

   No new impervious surfaces are created, and no toxic runoff will be generated.

4. **Treated water may be allowed to enter the stream critical area buffer.**

   The project will not generate water that needs to be treated.

5. **The outer edge of the stream critical area buffer shall be planted with dense vegetation to limit pet or human use.**

   The stream banks and buffer will be restored with native planting where impacted by the project.

6. **Use of pesticides, insecticides and fertilizers within 150 feet of the edge of the stream critical area buffer shall be in accordance with the City of Bellevue's "Environmental Best Management Practices", now or as hereafter amended. S60-Wilburton Sewer Capacity Upgrade Project 29 City of Bellevue - Critical Areas Report**

   Any use of these products will be consistent with the BMPs already employed by the City's Parks Department as this site is within a City park. Parks will be performing the plant installation and maintenance and will do so per their BMPs.

iv. Consistency with LUC 20.25H.180

The project biologist has determined that the project site is entirely within the 100-year floodplain and within the jurisdiction of the US Army Corps. The Corps will review a habitat assessment for conformance with the Endangered Species Act as part of the federal permit review. A copy of the approved federal permit was submitted with this application and is in the project file. Copies of all approved state and federal permits are required to

be submitted to the City. **See Section X for a related condition of approval.**

IV. Public Notice and Comment

Application Date:	July 5, 2018
Public Notice (500 feet):	August 2, 2018
Minimum Comment Period:	August 16, 2018

The Notice of Application for this project was published in the City of Bellevue Weekly Permit Bulletin and the Seattle Times on August 2, 2018. Notice was also mailed to property owners within 500 feet of the project site. Comments were received from Karen Walter with the Muckleshoot tribe concerning the placement of wood structures and the design and monitoring of fish passage. The project consultant responded to these comments and revised the plans and monitoring plans. Submitted comments and responses are reference document 4 found in the project file.

V. Summary of Technical Reviews

A. Clearing and Grading

The Clearing and Grading Division of the Development Services Department has reviewed the proposed site development for compliance with Clearing and Grading codes and standards. The Clearing and Grading staff found no issues with the proposed development.

B. Utilities

The City's Utility Department reviewed and approved the proposal.

VI. State Environmental Policy Act (SEPA)

The environmental review indicates no probability of significant adverse environmental impacts occurring as a result of the proposal. The Environmental Checklist submitted with the application adequately discloses expected environmental impacts associated with the project. The City codes and requirements, including the Clear and Grade Code, Utility Code, Land Use Code, Noise Ordinance, Building Code and other construction codes are expected to mitigate potential environmental impacts. Therefore, issuance of a Determination of Non-Significance (DNS) is the appropriate threshold determination under the State Environmental Policy Act (SEPA) requirements.

A. Earth, Air, and Water

The only earth disturbance anticipated will be temporary resulting from installation of new wood and rock structures along the stream bank and work within the stream channel to restore fish passage. Any erosion potential would be temporary and mitigated by required best management practices for erosion control in conformance with the City's Clearing and Grading Code BCC 23.76. An approved temporary erosion and sedimentation control (TESC) plan

and a storm water pollution prevention plan (CSWPPP) is required before the project's underlying clear & grade permit will be issued.

B. Animals

Long-term effects of the proposed project will provide a net benefit to improve fish habitat and fish passage as well as to overall habitat conditions. Fish passage barriers and weir steps with drop distances exceeding WDFW and NMFS standards will be reconfigured to allow for fish passage. Construction of bank protection will prevent unintended bank erosion and sediment input into the stream. The proposed project will not result in development (i.e., impervious surfaces) or long-term adverse impacts to habitat for species of local importance and will improve habitat over existing conditions.

C. Plants

The proposed improvement along the stream bank will enable additional bank planting which is proposed. At least 7,270 square feet of stream bank is proposed to be removed of invasive vegetation and replanted with native vegetation.

D. Noise

The completed project will not generate any noise. The project is adjacent to primarily residential properties whose residents are most sensitive to disturbance from construction noise during evening, late night and weekend hours when they are likely to be at home. Construction noise will be limited by the City's Noise Ordinance (Chapter 9.18 BCC) which regulates construction hours and noise levels. **See Section X for a related condition of approval.**

VII. Changes to Proposal Due to Staff Review

Staff requested verification of floodplain and habitat impacts to ensure compliance under the FEMA BiOp that requires addressing impacts to listed endangered species.

VIII. Decision Criteria

A. 20.30P.140 Critical Area Land Use Permit Decision Criteria – Decision Criteria

The Director may approve, or approve with modifications an application for a Critical Area Land Use Permit if:

1. **The proposal obtains all other permits required by the Land Use Code;**
   The applicant must obtain approval of clearing and grading permit 18-119530-GB and any other building permits for the project. **See Section X for a related condition of approval.**

2. **The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer;**

The project utilizes the best available construction techniques to have the least impact on critical areas and buffers as possible. Permanent impacts are proposed by the project but are related to restoring fish passage and some impacts are being removed by restoring fish passage. This work will result in a gain in stream habitat functions. All areas of temporary disturbance are proposed to be restored following construction. **See Section X for a related condition of approval.**

3. **The proposal incorporates the performance standards of Part 20.25H to the maximum extent applicable, and;**

   As discussed in Section III of this report performance standards will be met.

4. **The proposal will be served by adequate public facilities including street, fire protection, and utilities; and;**

   The proposed project has no impact on public facilities.

5. **The proposal includes a mitigation or restoration plan consistent with the requirements of LUC Section 20.25H.210; and**

   Areas of temporary disturbance are proposed to be restored as described in the project plans which are reference document 1 and the critical areas reports and studies which are reference document 2. All proposed improvements are to be monitored per the submitted monitoring plan found in the project file and listed in this report as reference document 3. **See Section X for a related condition of approval.**

6. **The proposal complies with other applicable requirements of this code.**

   As discussed in this report, the proposal complies with all other applicable requirements of the Land Use Code.

IX. Conclusion and Decision

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, SEPA, City Code and Standard compliance reviews, the Director of Development Services Department does hereby **approve with conditions** the proposal to restore fish passage and stream bank stabilization in Kelsey Creek at the Glendale golf course. **A Clearing and Grading permit is required, and all plans are subject to review for compliance with applicable City of Bellevue codes and standards.**

Note- Expiration of Approval of Critical Areas Land Use Permit: In accordance with LUC 20.30P.150 a Critical Areas Land Use Permit automatically expires and is void if the applicant fails to file for a clearing and grading permit or other necessary development permits within

one year of the effective date of the approval.

X. Conditions of Approval

The applicant shall comply with all applicable Bellevue City Codes and Ordinances including but not limited to:

Applicable Ordinances	Contact Person
Clearing and Grading Code – BCC 23.76	Savina Uzunow, 425-452-7860
Utilities Code – BCC 24	Alison Kolberg, 425-452-6054
Land Use Code – BCC Title 20	Reilly Pittman, 425-452-4350
Noise Control – BCC 9.18	Reilly Pittman, 425-452-2973

The following conditions are imposed under the Bellevue City Code authority referenced:

1. **Clearing and Grading Permit and Building Permit Required:** Grading permit 18-119530-GB for project clearing and grading is required to be approved. Plans submitted as part of this or any associated permit application shall be consistent with the activity permitted under this approval.

   Authority: Land Use Code 20.30P.140
   Reviewer: Reilly Pittman, Development Services Department

2. **Obtain all Other Applicable State and/or Federal Permits:** Before work can proceed, all required federal and state permits and approvals must be obtained by the applicant. A copy of the approved Section 404 permit issued by the Army Corps of Engineers and the approved Hydraulic Project Approval (HPA) issued by the Washington State Department of Fish and Wildlife shall be submitted to the City of Bellevue, prior to beginning construction.

   Authority: Land Use Code 20.25H.080
   Reviewer: Reilly Pittman, Development Services Department

3. **Restoration Plan:** Plans submitted under the clearing and grading permit for restoration shall be consistent with this approval and the restoration plans found as attachment 1 and described in attachment 2. All temporary disturbance is required to be restored.

   Authority: Land Use Code 20.30P.140; 20.25H.220
   Reviewer: Reilly Pittman, Development Services Department

4. **Maintenance and Monitoring:** Details regarding the maintenance and monitoring proposed for this project are found in the monitoring plan. This plan is required to be submitted under the clearing and grading permit.

   Authority: Land Use Code 20.30P.140; 20.25H.220
   Reviewer: Reilly Pittman, Development Services Department

5. **Noise Control:** Noise related to construction is exempt from the provisions of BCC 9.18 between the hours of 7 am to 6 pm Monday through Friday and 9 am to 6 pm on Saturdays, except for Federal holidays and as further defined by the Bellevue City Code. Noise emanating from construction is prohibited on Sundays or legal holidays unless expanded hours of operation are specifically authorized in advance. Requests for construction hour extension must be done in advance with submittal of a construction noise expanded exempt hours permit.

   Authority: Bellevue City Code 9.18
   Reviewer: Reilly Pittman, Development Services Department

CITY OF BELLEVUE
UTILITIES

9-5-2018 Revisions:
Added lines delineating area of permanent cut/fill to existing conditions plan view sheets and Legend (Sheet 3)
Revised rock barb at the 8th tee (Weirs 8-9) - Sheet 15

KELSEY CREEK - GLENDALE 8TH TEE
C.I.P. D-86

MAYOR
JOHN CHELMINIAK

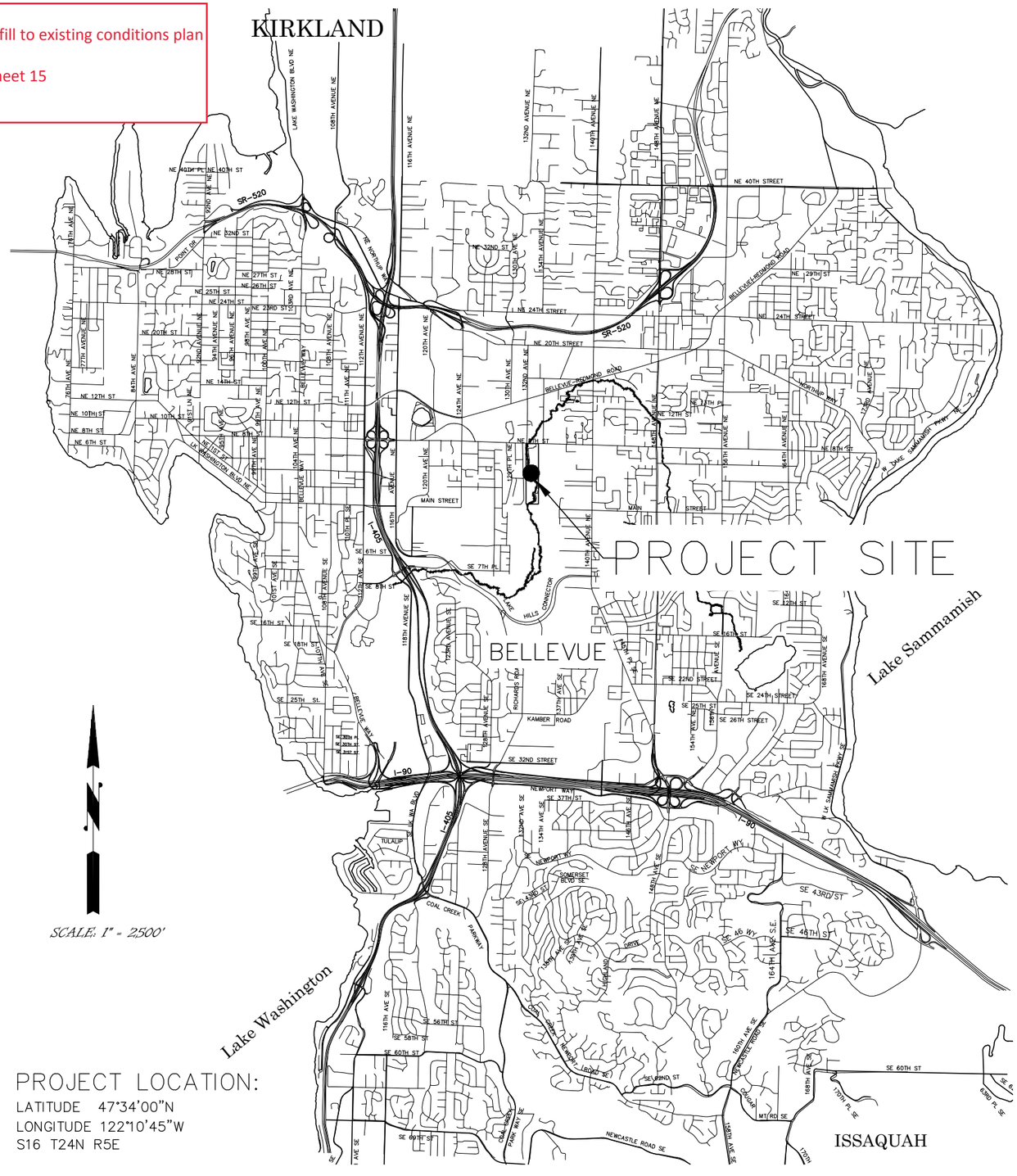
DEPUTY MAYOR
LYNNE ROBINSON

CITY MANAGER
BRAD MIYAKE

DIRECTOR OF UTILITIES
NAV OTAL

CITY COUNCIL
CONRAD LEE
JENNIFER ROBERTSON
JARED NIEUWENHUIS
JANICE ZAHN
JOHN STOKES

DRAWING LIST	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES
3	LEGEND AND CONTROL
4	ACCESS PLAN
5	EXISTING CONDITIONS AND BYPASS PLAN – WEIRS 14–17
6	PROPOSED PLAN & PROFILE WEIRS 16–17
7	PROPOSED PLAN & PROFILE WEIRS 14–15
8	EXISTING & PROPOSED PLAN WEIRS 12–13
9	PROFILE & CROSS–SECTION WEIRS 12–13
10	EXISTING & PROPOSED PLAN WEIRS 10–11
11	PROFILE WEIRS 10–11
12	EXISTING PLAN WEIRS 8–9
13	PROPOSED PLAN WEIRS 8–9
14	PROFILE WEIRS 8–9
15	CROSS–SECTION WEIRS 8–9
16	EXISTING PLAN WEIRS 6–7
17	PROPOSED PLAN WEIRS 6–7
18	PROFILE WEIRS 6–7
19	EXISTING & PROPOSED PLAN WEIRS 4–5
20	EXISTING & PROPOSED PLAN WEIRS 2–3
21	PROFILE WEIRS 2–3
22	EXISTING & PROPOSED PLAN WEIR 1
23	PROFILE WEIR 1
24	TIMBER CRIB LAYERING PLANS
25	BYPASS DETAILS
26	PLANTING DETAILS



PROJECT LOCATION:
LATITUDE 47°34'00"N
LONGITUDE 122°10'45"W
S16 T24N R5E

Approved For Construction

DESIGN MANAGER DATE

PROJECT MANAGER DATE

BID NO. _____

GENERAL NOTES

1. THESE PLANS HAVE BEEN PREPARED FOR THE EXCLUSIVE USE OF THE CITY OF BELLEVUE, HEREAFTER REFERRED TO AS "OWNER" AND THEIR AUTHORIZED AGENTS.

2. NATURAL SYSTEMS DESIGN HEREAFTER REFERRED TO AS "ENGINEER"IS RESPONSIBLE FOR THE PREPARATION OF THESE ORIGINAL PLANS AND ASSOCIATED SPECIFICATIONS; AND WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGE, OR USE, OF THESE PLANS WHICH INCLUDES ALTERATION, DELETION, OR EDITING OF THIS DOCUMENT WITHOUT EXPLICIT WRITTEN PERMISSION FROM THE ENGINEER. ANY OTHER UNAUTHORIZED USE OF THIS DOCUMENT IS PROHIBITED.

3. MINOR MODIFICATIONS ARE EXPECTED TO SUIT JOB SITE DIMENSIONS OR CONDITIONS. SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK. THE OWNER, ENGINEER AND APPROPRIATE REGULATORY AGENCIES SHALL BE NOTIFIED OF ANY OWNER–AUTHORIZED CHANGE RESULTING IN MORE THAN A 10% DESIGN CHANGE OF PROPOSED FOOTPRINT OR THAT SIGNIFICANTLY AFFECTS THE INTENDED BENEFIT OR FUNCTION OF A PROJECT ELEMENT.

4. THE LOCATION OF ALL FEATURES SHOWN IS APPROXIMATE.

5. THE CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; AND FURTHER AGREES THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS IN ACCORDANCE WITH THE PROVISIONS OUTLINED BY THE PROJECT CONTRACT AND SPECIFICATIONS.

6. ALL IMPROVEMENTS SHALL BE ACCOMPLISHED UNDER THE APPROVAL, INSPECTION, AND TO THE SATISFACTION OF THE OWNER. IMPROVEMENT CONSTRUCTION SHALL COMPLY WITH THESE PLANS AND THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) STANDARD PLANS FOR CONSTRUCTION OF ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, CURRENT EDITION UNLESS NOTED OTHERWISE. ALL REFERENCES TO THE "STANDARD SPECIFICATIONS" SHALL MEAN THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION OF LOCAL STREETS AND ROADS, CURRENT EDITION. CONSTRUCTION NOT SPECIFIED ON THESE PLANS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR IS OBLIGATED TO BE FAMILIAR WITH APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS NOT DISCUSSED IN THE GENERAL NOTES. THE CONTRACT SPECIAL PROVISIONS SHALL SUPERSEDE THOSE OF THE STANDARD SPECIFICATIONS WHERE DISCREPANCIES OCCUR.

7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTOR(S) TO EXAMINE THE PROJECT SITE PRIOR TO THE OPENING OF BID PROPOSALS. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, SUCH AS THE NATURE AND LOCATION OF THE WORK; AND THE GENERAL AND LOCAL CONDITIONS, PARTICULARLY THOSE AFFECTING THE AVAILABILITY OF TRANSPORTATION, THE DISPOSAL, HANDLING, AND STORAGE OF MATERIALS, AVAILABILITY OF LABOR, WATER, ELECTRICITY, ROADS, THE UNCERTAINTIES OF WEATHER, THE CONDITIONS OF THE GROUND, SURFACE AND SUBSURFACE MATERIALS, GROUNDWATER, THE EQUIPMENT AND FACILITIES NEEDED FOR AND DURING THE PERFORMANCE OF THE WORK, AND THE COSTS THEREOF. ANY FAILURE BY THE CONTRACTOR AND SUBCONTRACTOR(S) TO ACQUAINT THEMSELVES WITH ALL THE AVAILABLE INFORMATION WILL NOT RELIEVE THE CONTRACTOR AND SUBCONTRACTOR(S) FROM RESPONSIBILITY FOR PROPERLY ESTIMATING THE DIFFICULTY AND COST OF SUCCESSFULLY PERFORMING THE WORK.

8. THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING THE CONTRACT DOCUMENTS AND FOR ALL SUBMITTALS REQUIRED TO THE OWNER FOR REVIEW AND ACCEPTANCE.

PERMIT NOTES

1. EVERY REASONABLE EFFORT SHALL BE MADE TO CONDUCT THE ACTIVITIES SHOWN IN THESE PLANS, IN A MANNER THAT MINIMIZES THE ADVERSE IMPACT ON WATER QUALITY, FISH AND WILDLIFE, AND THE NATURAL ENVIRONMENT.

2. ALL WORK WILL BE IN COMPLIANCE WITH PERMIT CONDITIONS ISSUED BY PERTINENT REGULATORY AGENCIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE COPIES OF ALL PERMITS ON THE JOB SITE, UNDERSTAND AND COMPLY WITH ALL PERMIT CONDITIONS.

3. ALL WORK THAT DISTURBS THE SUBSTRATE, BANK, OR SHORE OF A WATERS OF THE STATE THAT CONTAINS FISH LIFE SHALL BE CONDUCTED ONLY DURING THE WORK PERIOD FOR THAT WATERBODY AS ALLOWED BY RELEVANT HYDRAULIC WORK PERMITS. THOSE PORTIONS OF THE PROJECT WORK THAT OCCUR OUTSIDE OR ABOVE THE ORDINARY HIGH WATER MARK (ABOVE THE USACE JURISDICTIONAL LINE) ARE NOT SUBJECT TO THE WORK PERIODS DESCRIBED ABOVE UNLESS SPECIFIED IN THE RELEVANT PERMITS.

4. ALL ACTIVITIES THAT INVOLVE WORK ADJACENT TO, OR WITHIN THE WETTED CHANNEL SHALL, AT ALL TIMES, REMAIN CONSISTENT WITH ALL APPLICABLE WATER QUALITY STANDARDS; EFFLUENT LIMITATION; AND STANDARDS OF PERFORMANCE, PROHIBITIONS, PRETREATMENT STANDARDS, AND MANAGEMENT PRACTICES ESTABLISHED PURSUANT TO THE CLEAN WATER ACT OR PURSUANT TO APPLICABLE STATE AND LOCAL LAW.

5. IF AT ANY TIME, AS A RESULT OF PROJECT ACTIVITIES, FISH ARE OBSERVED IN DISTRESS, A FISH KILL OCCURS, OR WATER QUALITY PROBLEMS DEVELOP (INCLUDING EQUIPMENT LEAKS OR SPILLS), OPERATIONS SHALL CEASE AND THE OWNER SHALL BE NOTIFIED IMMEDIATELY.

6. IF, DURING CONSTRUCTION, ARCHAEOLOGICAL REMAINS ARE ENCOUNTERED, CONSTRUCTION IN THE VICINITY SHALL BE HALTED, AND THE STATE OFFICE OF HISTORIC PRESERVATION AND THE OWNER SHALL BE NOTIFIED IMMEDIATELY.

SURVEY NOTES

1. UNLESS NOTED OTHERWISE ON THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION.

2. THE CONTRACTOR SHALL MAINTAIN A SET OF PLANS ON THE JOB SHOWING "AS–CONSTRUCTED" CHANGES MADE TO DATE. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL SUPPLY TO OWNER A SET OF PLANS, MARKED UP TO THE SATISFACTION OF THE OWNER, REFLECTING THE AS–CONSTRUCTED MODIFICATIONS.

3. ELEVATIONS SHOWN ON THE PLANS FOR PIPE INVERTS, TOPS OF BANKS, THALWEG, GRADE CONTROLS, ETC., ARE BASED UPON THE TOPOGRAPHIC INFORMATION SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY ALL NECESSARY SURFACE ELEVATIONS IN THE FIELD AND NOTIFY THE OWNER OF ANY DISCREPANCIES, WHICH MIGHT AFFECT PROPER OPERATION OF THE NEW FACILITIES BEFORE BREAKING GROUND AND PRIOR TO FACILITY INSTALLATION. THE OWNER SHALL BE CONTACTED IN THE EVENT ELEVATIONS ARE INCORRECT SO THAT THE PROPER ADJUSTMENTS CAN BE MADE BY ENGINEER PRIOR TO THE INSTALLATION OF THE FACILITIES, AS SET FORTH IN THE SPECIAL PROVISIONS.

4. EXISTING STRUCTURES, STREAM ALIGNMENT, AND TOPOGRAPHY WERE PROVIDED BY _____ AND IS REPRESENTATIVE OF DECEMBER 2013 CONDITIONS. THE HORIZONTAL DATUM IS NAD83 WASHINGTON STATE PLANE NORTH (FT). THE VERTICAL DATUM IS NAVD 88 (FT). REFER TO CITY OF BELLEVUE CONTROL WEBSITE FOR ADDITIONAL CONTROL INFORMATION.

EROSION, SEDIMENT CONTROL AND WATER MANAGEMENT NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING ALL TEMPORARY EROSION & SEDIMENT CONTROL (TESC) MEASURES. THE EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS. TESC MEASURES SHOWN ON THESE PLANS ARE CONSIDERED THE MINIMUM REQUIRED. CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING ANY ADDITIONAL TESC MEASURES NEEDED TO MEET PERMIT REQUIREMENTS AND STATE AND LOCAL LAWS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND PERFORMANCE OF THE TEMPORARY EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE PROJECT.

2. ACTIVITIES SHALL BE DESIGNED AND CONSTRUCTED TO AVOID AND MINIMIZE ADVERSE IMPACTS TO WATERS OF THE UNITED STATES TO THE MAXIMUM EXTENT PRACTICAL THROUGH THE USE OF PRACTICAL ALTERNATIVES. ALTERNATIVES THAT SHALL BE CONSIDERED INCLUDE THOSE THAT MINIMIZE THE NUMBER AND EXTENT OF IN–WATER WORK AND EQUIPMENT CROSSINGS OF WETTED CHANNELS.

3. AT NO TIME SHALL SEDIMENT–LADEN WATER BE DISCHARGED OR PUMPED DIRECTLY INTO THE SUBJECT RIVER, STREAM, OR WETLAND. WATER SHALL BE DISCHARGED IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN THE PROJECT PERMITS AND / OR SPECIFICATIONS.

4. FLOWS SHALL BE GRADUALLY RE–INTRODUCED TO CONSTRUCTED SECTIONS OF STREAM. THESE INITIAL FLOWS SHALL BE FILTERED TO CAPTURE SUSPENDED SEDIMENT UNTIL TURBID CONDITIONS SUBSIDE IN UNIMPEDED FLOW.

5. IF HIGH WATER LEVEL CONDITIONS THAT CAUSE SILTATION OR EROSION ARE ENCOUNTERED DURING CONSTRUCTION, WORK SHALL STOP UNTIL THE WATER LEVEL SUBSIDES.

6. PERMIT CONDITIONS CONTAIN SPECIFIC REQUIREMENTS FOR THE CONTROL OF EROSION AND TURBIDITY FROM PROJECT OPERATIONS. TURBIDITY WILL BE MONITORED ON A FREQUENT BASIS BY THE PROJECT MANAGEMENT AND INSPECTION STAFF ON–SITE. TURBIDITY AMOUNTS IN EXCESS OF THE PERMITTED CONCENTRATIONS AND/OR DURATIONS WILL CAUSE WORK TO BE STOPPED UNTIL IMPROVED PRACTICES ARE IN EFFECT AND THE PROBLEMS CONTROLLED. THE CONTRACTOR IS COMPLETELY RESPONSIBLE FOR ANY PROJECT DELAYS THAT OCCUR BY NATURE OF THIS FAILURE TO ADEQUATELY CONTAIN SEDIMENT ON–SITE.

7. CONTRACTOR SHALL LIMIT MACHINERY MOVEMENT TO CONSTRUCTION AREAS DEFINED ON SITE PLAN OR IDENTIFIED AS ACCEPTABLE BY THE ENGINEER OR OWNER.

8. ALL EXTERNAL GREASE AND OIL SHALL BE PRESSURE–WASHED OFF THE EQUIPMENT PRIOR TO TRANSPORT TO THE SITE.

9. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT NO PETROLEUM PRODUCTS, HYDRAULIC FLUID, SEDIMENTS, SEDIMENT–LADEN WATER, CHEMICALS, OR ANY OTHER TOXIC OR DELETERIOUS MATERIALS ARE ALLOWED TO ENTER OR LEACH INTO THE SUBJECT RIVER, STREAM, OR WETLAND.

10. THE CONTRACTOR SHALL HAVE AN EMERGENCY SPILL KIT ONSITE AT ALL TIMES.

11. NO TREES OR WETLAND VEGETATION SHALL BE REMOVED UNLESS THEY ARE SHOWN AND NOTED TO BE REMOVED ON THE PLANS OR AS DIRECTLY SPECIFIED ON–SITE BY THE PROJECT MANAGEMENT STAFF. ALL TREES CONFLICTING WITH GRADING SHALL BE REMOVED. NO GRADING SHALL TAKE PLACE WITHIN THE DRIP LINE OF TREES NOT TO BE REMOVED UNLESS OTHERWISE APPROVED.

12. FOLLOWING CONSTRUCTION, SITE RESTORATION WILL INCLUDE ESTABLISHING LONG–TERM EROSION PROTECTION MEASURES. THESE MEASURES WILL INCLUDE PLANTINGS, EROSION CONTROL FABRIC, SEED, AND MULCH. EQUIPMENT AND EXCESS SUPPLIES WILL BE REMOVED AND THE WORK AREA WILL BE CLEANED. MAINTENANCE ACTIVITIES FOR THE NEWLY CONSTRUCTED RESTORATION PROJECTS ARE ANTICIPATED TO OCCUR PERIODICALLY.

13. ALL BEST MANAGEMENT PRACTICES (BMP) SHALL BE INSTALLED IN ACCORDANCE WITH THE WASHINGTON STATE DEPARTMENT OF ECOLOGY STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON (2005).

CONSTRUCTION NOTES

1. CONTRACT DOCUMENTS REFER TO THESE PLANS.

2. CONTRACTOR SHALL FURNISH ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO COMPLETE ALL WORK AS INDICATED IN THE CONTRACT DOCUMENTS.

3. CONSTRUCTION HOURS SHALL BE WEEKDAYS BETWEEN 7:30 A.M. AND 4:00 P.M. UNLESS PRIOR APPROVAL IS RECEIVED FROM THE OWNER.

4. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE OWNER PRIOR TO PROCEEDING WITH THE WORK.

5. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE BY THE OWNER OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

6. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.

7. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE BEST SKILLS AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THIS CONTRACT.

8. THE CONTRACTOR SHALL MAKE ALL NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, ROADWAY, DRAINAGE WAYS, PRIVATE BRIDGE, CULVERTS, AND VEGETATION UNTIL SUCH ITEMS ARE TO BE DISTURBED OR REMOVED AS INDICATED ON THE CONTRACT DOCUMENTS.

9. THE CONTRACTOR SHALL KEEP THE JOB SITE CLEAN AND HAZARD FREE. CONTRACTOR SHALL DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH FOR THE DURATION OF THE WORK. UPON COMPLETION OF WORK, CONTRACTOR SHALL REMOVE ALL MATERIAL AND EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY.

10. NOTES AND DETAILS ON THE PLANS SHALL TAKE PRECEDENCE OVER GENERAL NOTES HEREIN.

11. DIMENSIONS CALLOUTS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON THE PLANS.

12. THE PLANS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF ALL CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURES, WORKS, AND THE PUBLIC DURING CONSTRUCTION.

13. MATERIAL SHALL NOT BE STORED OUTSIDE OF IDENTIFIED STAGING AREAS. THE CONTRACTOR SHALL USE ONLY DESIGNATED SPECIFIC SITES FOR STORAGE OF EQUIPMENT AND MATERIALS AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SECURITY OF ALL EQUIPMENT AND MATERIALS.

14. FOLLOW WASHINGTON DEPARTMENT OF FISH AND WILDLIFE (WDFW) PROCEDURES FOR PREVENTING THE SPREAD OF AQUATIC INVASIVE SPECIES, SUCH AS ZEBRA AND QUAGGA MUSSELS, WHICH INCLUDES CLEANING, DRAINING, AND DRYING WATERCRAFT BETWEEN USES, AND OTHER DECONTAMINATION MEASURES.

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GENERAL NOTES

SEC 34 TWP 25N RGE 5E | SHT 2 OF 26

GENERAL LEGEND

- PROPERTY LINE
- RIGHT OF WAY LINE
- EXISTING ROAD
- ACCESS ROAD
- EXISTING TRAIL
- CL — CL — CONSTRUCTION LIMIT
- GL — GL — GRADING LIMIT
- -5- EXISTING MAJOR CONTOUR
- -1- EXISTING MINOR CONTOUR
- 5 PROPOSED MAJOR CONTOUR
- 1 PROPOSED MINOR CONTOUR
- EXISTING STREAM BYPASS PIPES
- EXISTING FLOW
- OHWM EXISTING OHWM
- **OHWM** PROPOSED OHWM
- SD EXISTING STORM SEWER
- SS EXISTING SANITARY SEWER
- O — O — O — ORANGE SAFETY FENCE
- MATCH LINE
- DEMOLITION/REMOVAL AREA
- AREA OF DISTURBED GROUND (AREAS OF PERMANENT CUT OR FILL)
- EXISTING FENCE
- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- CONTROL POINT LOCATION
- REMOVE EXISTING DECIDUOUS TREE

- COMPACTED NATIVE MATERIAL
- STREAMBED GRAVEL
- STREAMBED COBBLE
- EXISTING GROUND
- EXISTING RIPRAP/ROCKERY
- LOW-LYING VEGETATED BENCH (SEE SHEET 26)
- ELEVATED VEGETATED BENCH (SEE SHEET 26)
- RIPARIAN BANK (SEE SHEET 26)
- LOW-LYING VEGETATED BENCH (SEE SHEET 26)

- EXISTING ROOTWAD
- RELOCATED ROOTWAD
- EXISTING STUMP
- RELOCATED STUMP
- EXISTING LOG
- RELOCATED LOG
- EXISTING BOULDER/ROCK
- RELOCATED BOULDER/ROCK
- EXISTING TO BE RELOCATED

RESTORATION LEGEND

- FILL SLOPE LINE
- EXCAVATION SLOPE LINE
- LOW LYING VEGETATED BENCH
- ELEVATED VEGETATED BENCH
- RIPARIAN BANK
- CONSTRUCTED VEGETATED BANK
- C900 LIMIT OF COIR FABRIC

DETAIL AND SECTION REFERENCING

- (1) NOTE REFERENCING NUMBER
- 4 / 6 DETAIL REFERENCE NUMBER / SHEET ON WHICH DETAIL APPEARS
- (TITLE) (SCALE) 4 / 2 DETAIL REFERENCE NUMBER / SHEET FROM WHICH DETAIL WAS TAKEN
- (TYP) SPECIFIES THAT DETAIL IS UNIFORMLY TYPICAL THROUGHOUT PROJECT EXCEPT WHERE OTHERWISE NOTED
- (VAR) SPECIFIES THAT DETAIL WAS TAKEN FROM SEVERAL SHEETS
- A — A_{32} SECTION A–A IS SHOWN ON SHEET 32

SECTION A–A 32 — SECTION A–A IS SHOWN ON SHEET 32
SCALE: NTS

TEMPORARY EROSION CONTROL LEGEND

- CLR — CLR — CLEARING LIMIT
- SF — SF — SILT FENCE
- BN — BN — TEMPORARY BLOCK NET
- TEMPORARY EASEMENT (TO BE DETERMINED)
- PROPOSED STAGING AREA
- PROPOSED WORK AREA
- x — x — TEMPORARY TREE PROTECTION FENCE
- TEMPORARY ACCESS BRIDGE
- COIR LOG
- (D) DEWATERING SUMP
- (I) PUMP INLET 3 / 25
- COFFER DAM 1 / 25
- BLOCK NET 2 / 25
- PUMP OUTLET 4 / 25

RELOCATED

LOG CONTROL POINT TABLE

WEIR NO.-POINT ID	NORTHING	EASTING
WEIR 14-1	227482	1312180
WEIR 14-2	227477	1312182
WEIR 12-1	227237	1312194
WEIR 12-2	227223	1312198
WEIR 12-3	227233	1312222
WEIR 10-1	226986	1312203

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LEGEND AND CONTROL

SEC 34 TWP 25N RGE 5E | SHT 3 OF 26

EDWARD R AND ELLEN K LENHART PARCEL NO 2332700010

SUSAN P BITTNER PARCEL NO 2332700009

BRIAN K AND TERESA OGISIMA PARCEL NO 2472300020

KAREN G MAUDEN PARCEL NO 2472300015

YEU-HSING TSENG PARCEL NO 2472300010

EUGENE D KATO PARCEL NO 2472300005

JAMES L SHOEMAKER PARCEL NO 2472100050

BING Y TANG PARCEL NO 2472100045

ROBERT A AND LESLYE M BOHRER PARCEL NO 2472100040

YAJIE AND SHEN LI PARCEL NO 2472100035

MARILYN T MCQUAID PARCEL NO 2472100030

HARRIET YURCHAK PARCEL NO 2472100025

VICTOR M MORGAN PARCEL NO 2472100020

MARJAN BADIEI PARCEL NO 2472100015

YUHUA DING AND XUDONG WANG PARCEL NO 2472100010

RFA ENTERPRISES INCORPORATE PARCEL NO 2472100005

8th Tee

TEE — TEE

WEIR 8–9

WEIR 10–11

WEIR 12–13

WEIR 14–15

WEIR 16–17

8th Green

MATCH LINE

Kelsey Creek

TEMPORARY CONSTRUCTION EASEMENT (40' WIDTH TYP.)

WORK AREA (TYP.)

CONTRACTOR ACCESS
NORTH GOLF COURSE IMPROVEMENTS
(USING TEMPORARY PLATING/MATTING)

NE 8th STREET
GATED ACCESS

4th Tee

NE 8TH ST

7th Green

GLENDALE GOLF AND COUNTRY CLUB
PARCEL NO 3425059010

9th Tee

0 25 50 100
SCALE IN FEET

WEIR 1

6th Green

7th Tee

WEIR 2–3

MATCH LINE

Kelsey Creek

WEIR 6–7

WEIR 4–5

17th Tee

18th Green

GLENDALE GOLF AND COUNTRY CLUB
PARCEL NO 3425059010

CONTRACTOR STAGING AREA (TYP.)

9th Green

0 25 50 100
SCALE IN FEET

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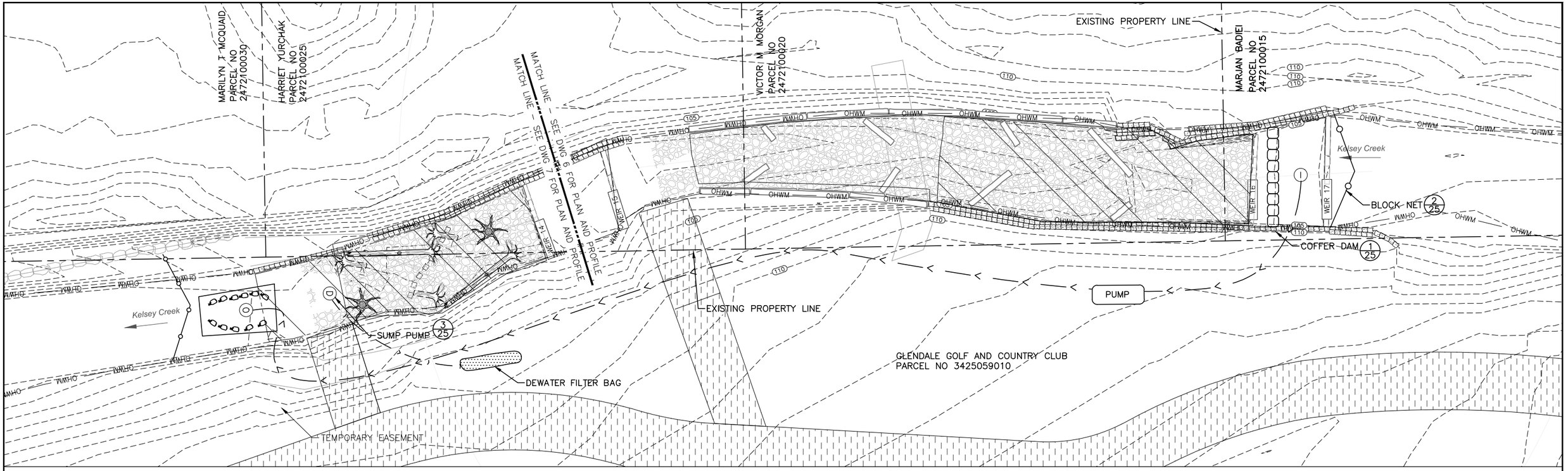
ACCESS PLAN

SEC 34 TWP 25N RGE 5E | SHT 4 OF 16



0 5 10 20

SCALE IN FEET

EXISTING CONDITIONS AND BYPASS PLAN
WEIRS 14-17

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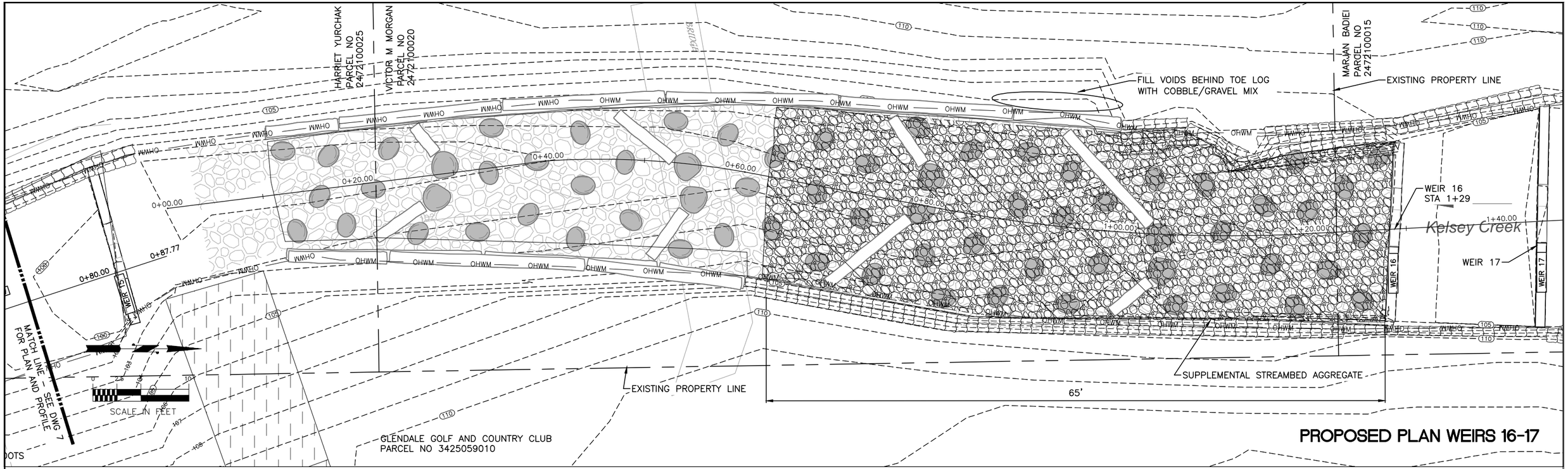
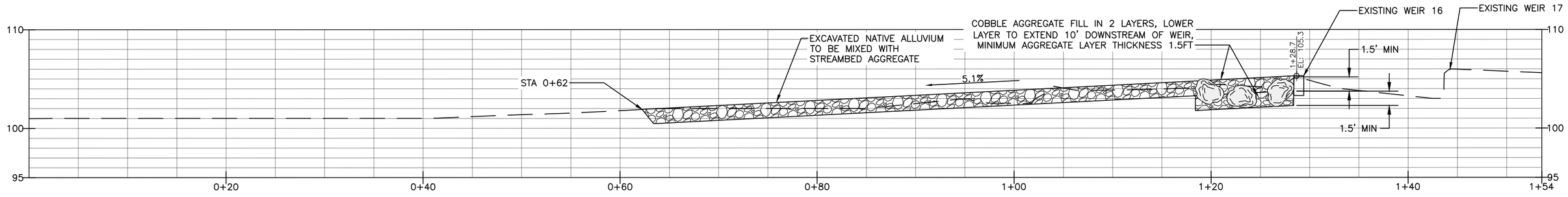
EXISTING CONDITIONS AND BYPASS PLAN - WEIRS 14-17

SEC 34 TWP 25N RGE 5E | SHT 5 OF 26





HORIZONTAL SCALE IN FEET
5 0 5 10
5 0 5 10
VERTICAL SCALE IN FEET
VERTICAL EXAGGERATION X 1

PROFILE WEIRS 16-17

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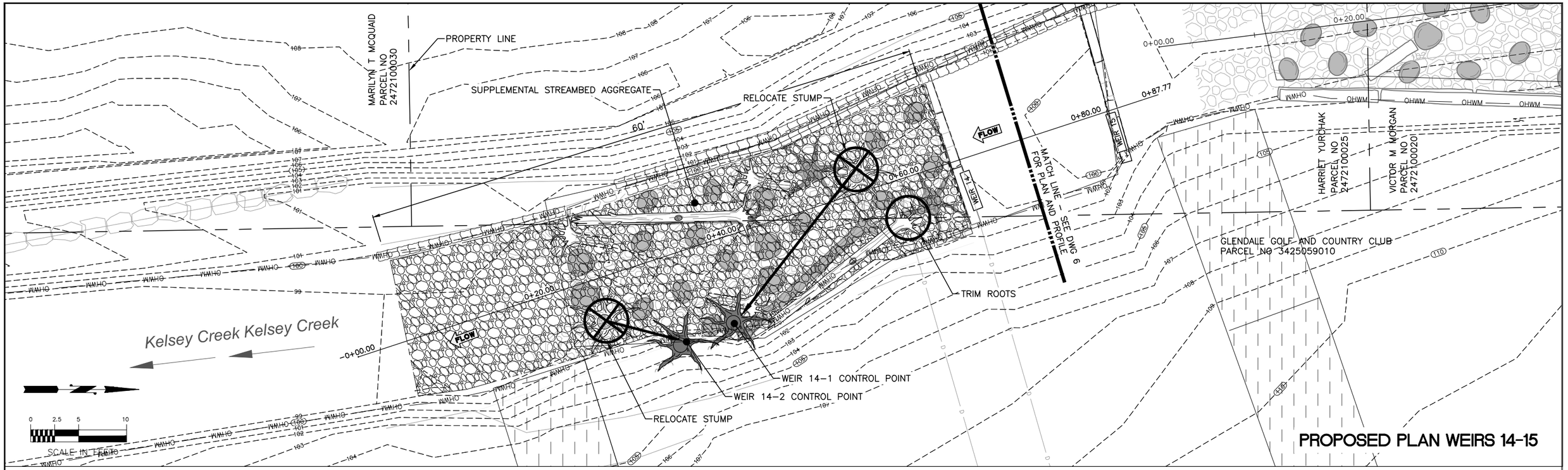
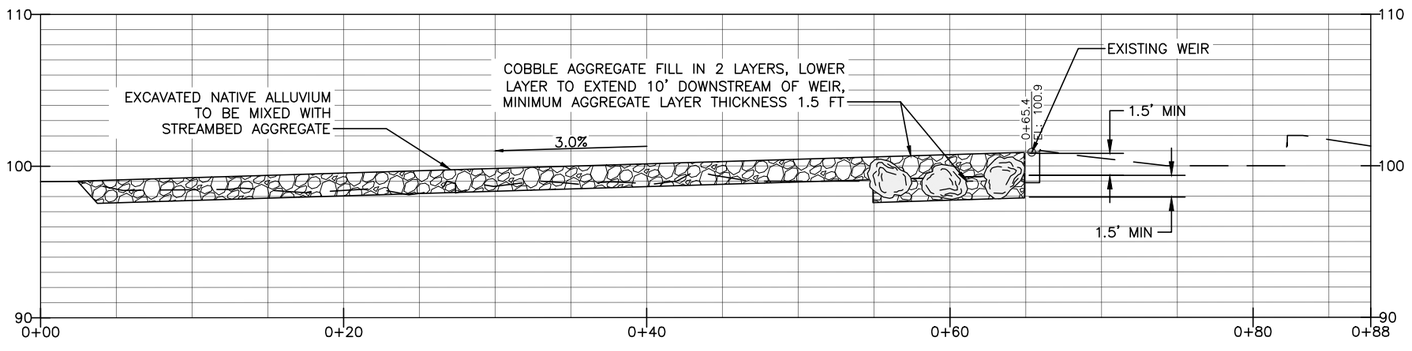
PROPOSED PLAN + PROFILE WEIRS 16-17

SEC 34 TWP 25N RGE 5E | SHT 6 OF 26



PROPOSED PLAN WEIRS 14-15



HORIZONTAL SCALE IN FEET
5 0 5 10
5 0 5 10
VERTICAL SCALE IN FEET
VERTICAL EXAGGERATION X 1

PROFILE WEIRS 14-15

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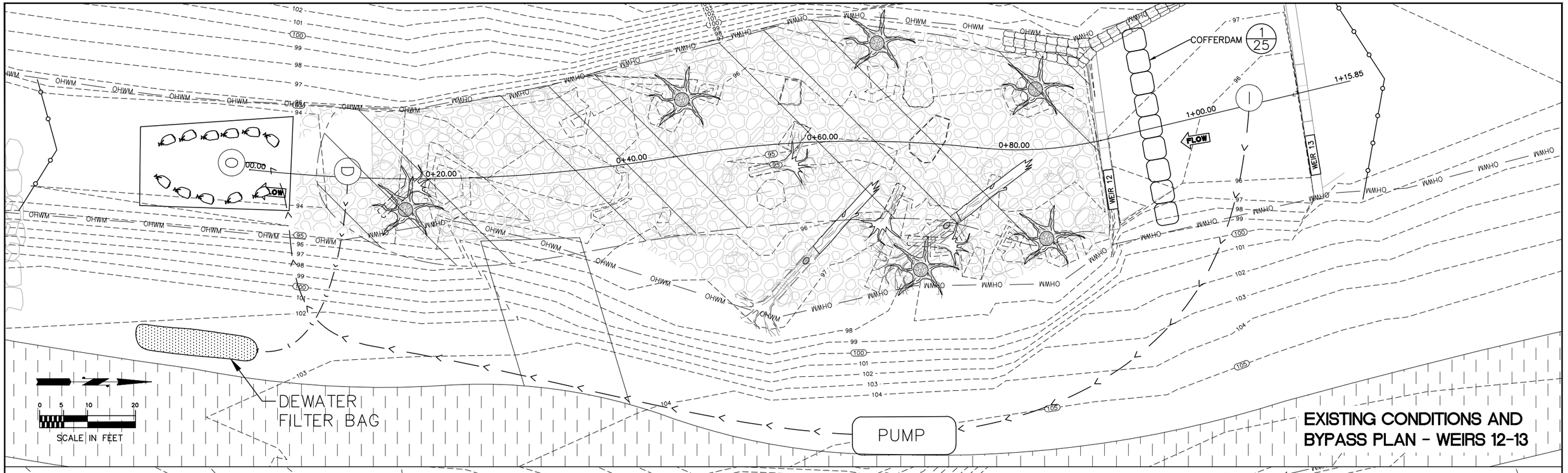
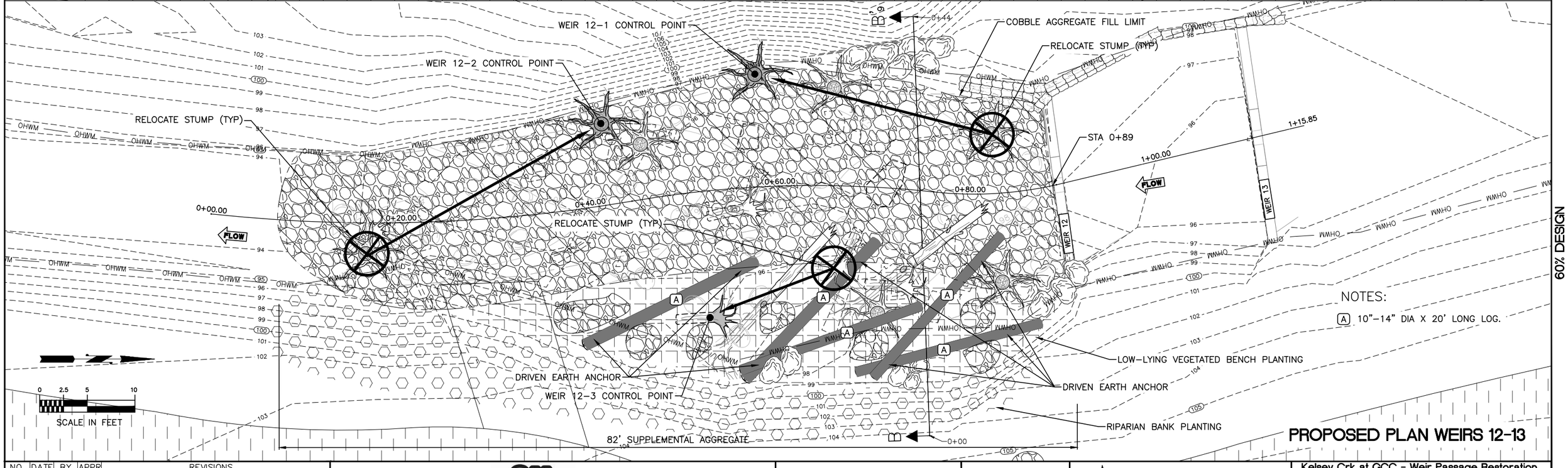
PROPOSED PLAN + PROFILE WEIRS 14-15

SEC 34 TWP 25N RGE 5E | SHT 7 OF 26



EXISTING CONDITIONS AND BYPASS PLAN - WEIRS 12-13



NOTES:

[A] 10"-14" DIA X 20' LONG LOG.

PROPOSED PLAN WEIRS 12-13

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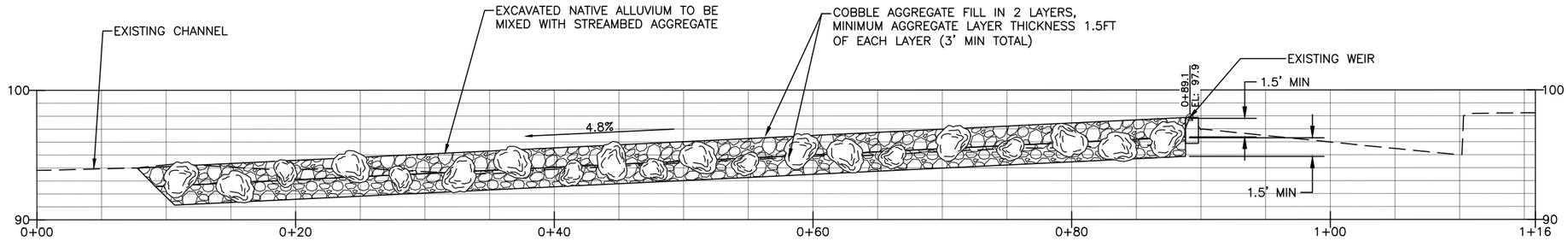
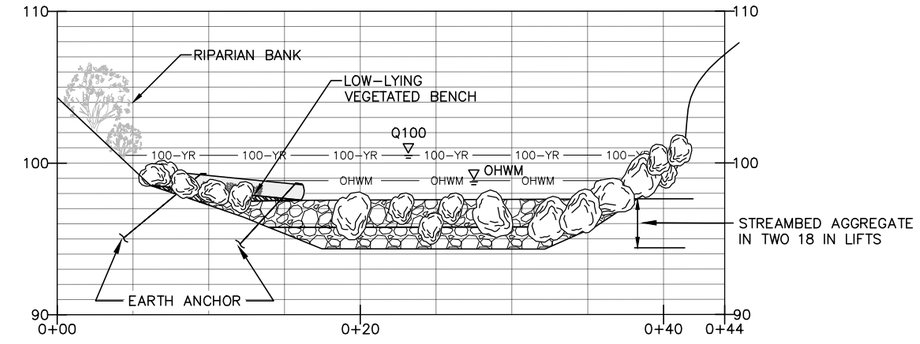
EXISTING + PROPOSED PLAN WEIRS 12-13

SEC 34 TWP 25N RGE 5E | SHT 8 OF 26



HORIZONTAL SCALE IN FEET
5 0 5 10
5 0 5 10
VERTICAL SCALE IN FEET
VERTICAL EXAGGERATION X 1

PROFILE WEIRS 12-13



HORIZONTAL SCALE IN FEET
5 0 5 10
5 0 5 10
VERTICAL SCALE IN FEET
VERTICAL EXAGGERATION X 1

SECTION B-B' 8

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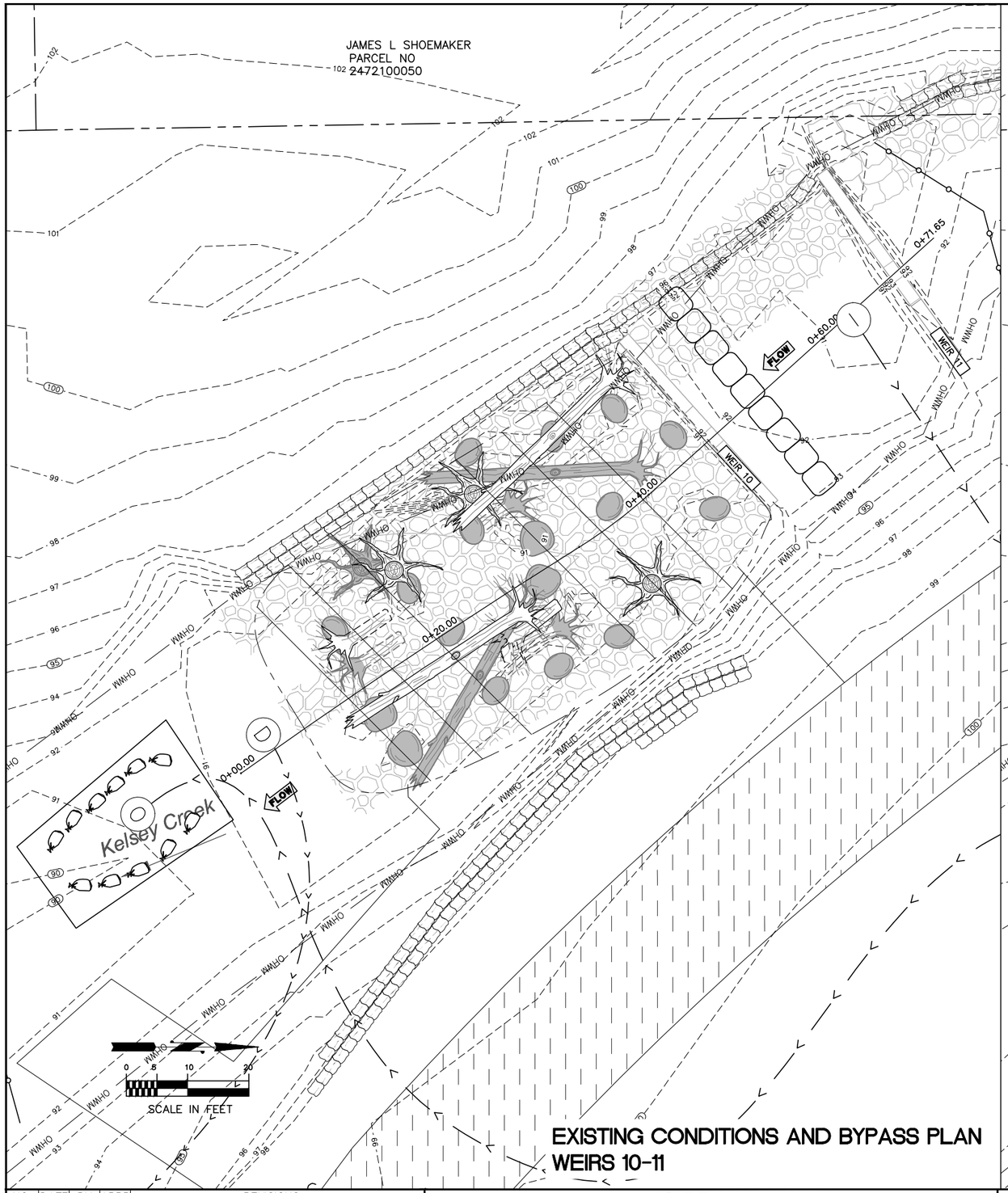
UTILITIES

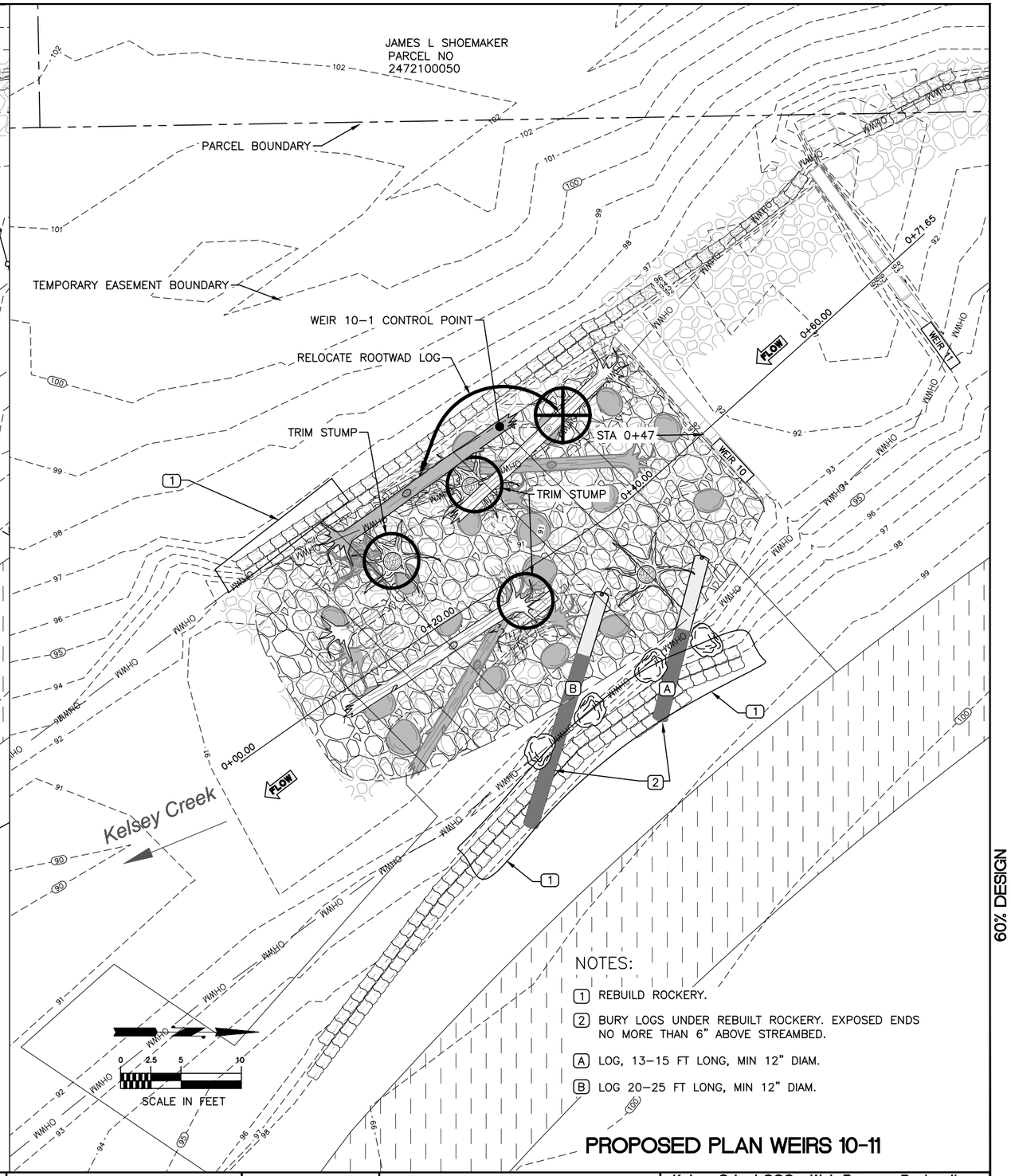
Kelsey Crk at GCC - Weir Passage Restoration and Stabilization

PROFILE + CROSS-SECTION WEIRS 12-13

SEC 34 TWP 25N RGE 5E | SHT 9 OF 26



EXISTING CONDITIONS AND BYPASS PLAN WEIRS 10-11



NOTES:

1. REBUILD ROCKERY.
2. BURY LOGS UNDER REBUILT ROCKERY. EXPOSED ENDS NO MORE THAN 6" ABOVE STREAMBED.

A. LOG, 13–15 FT LONG, MIN 12" DIAM.

B. LOG 20–25 FT LONG, MIN 12" DIAM.

PROPOSED PLAN WEIRS 10-11

60% DESIGN

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EXISTING + PROPOSED PLAN WEIRS 10-11

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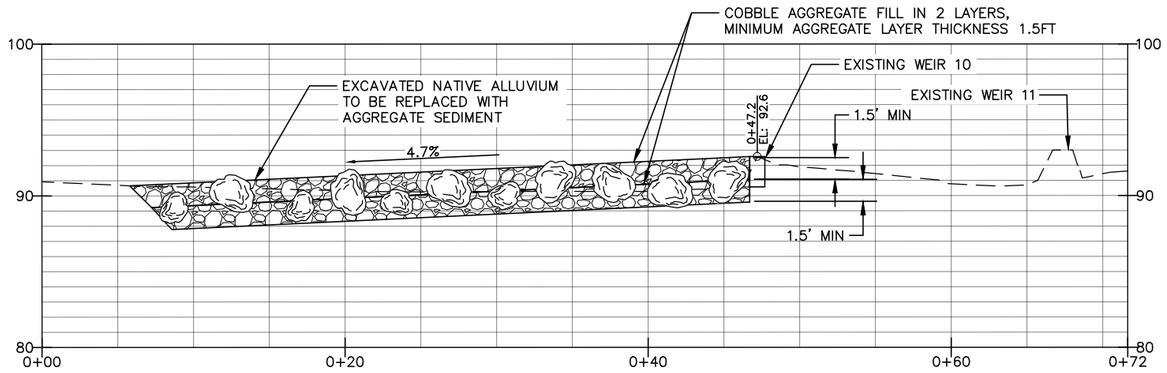

HORIZONTAL SCALE IN FEET
5 0 5 10
5 0 5 10
VERTICAL SCALE IN FEET
VERTICAL EXAGGERATION X 1

PROFILE WEIRS 10-11

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PROFILE WEIRS 10-11

SEC 34 TWP 25N RGE 5E | SHT 11 OF 26

APPROXIMATE EDGE OF EXISTING TEE BOX

DEWATER FILTER BAG

PUMP

TREE PROTECTION FENCE FOLLOW CITY OF BELLEVUE TREE PROTECTION BMP

WEIR 8

WEIR 9

0 5 10 20

SCALE IN FEET

60% DESIGN

EXISTING CONDITIONS AND BYPASS PLAN

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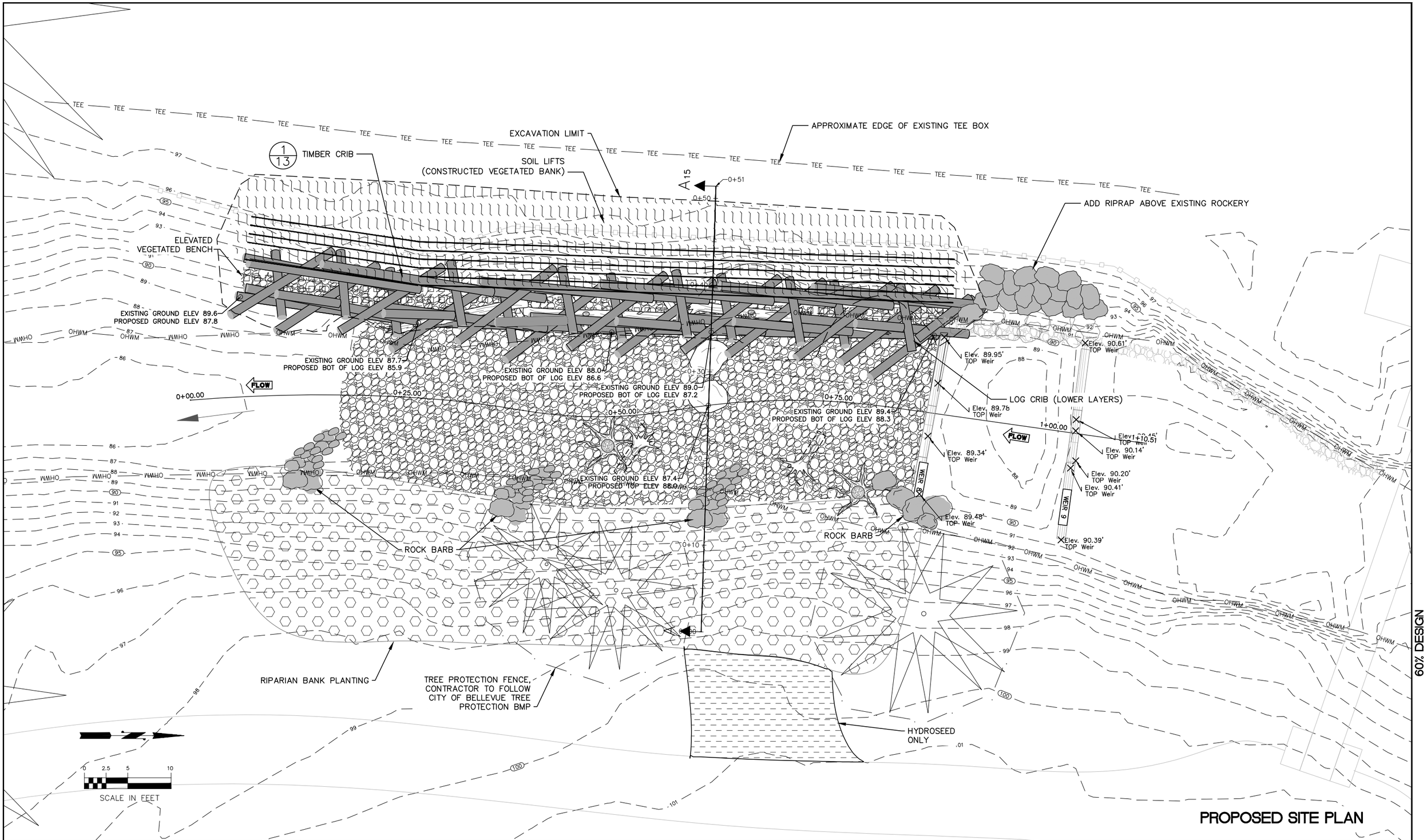
EXISTING PLAN WEIRS 8-9

SEC 34 TWP 25N RGE 5E | SHT 12 OF 26



PROPOSED SITE PLAN

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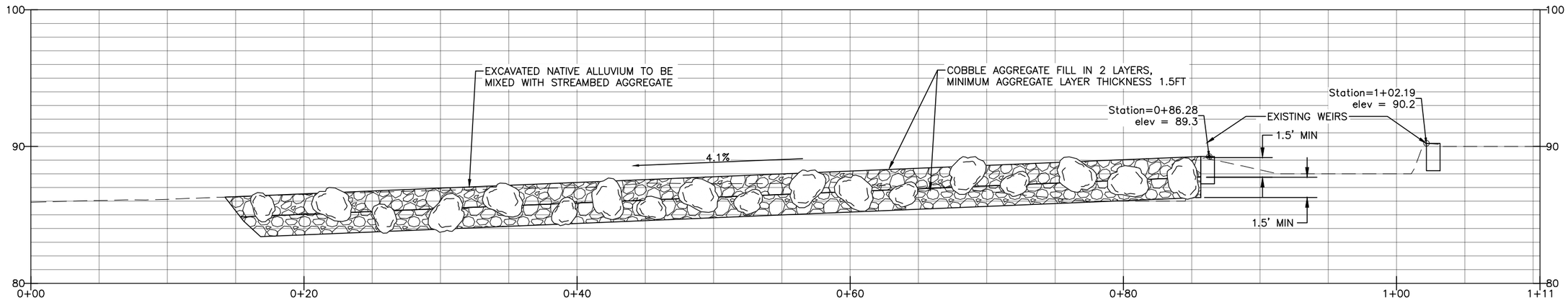
PROPOSED PLAN WEIRS 8-9

SEC 34 TWP 25N RGE 5E | SHT 13 OF 26



HORIZONTAL SCALE IN FEET
4 0 4 8
4 0 4 8
VERTICAL SCALE IN FEET
VERTICAL EXAGGERATION X 1

PROFILE WEIRS 8-9

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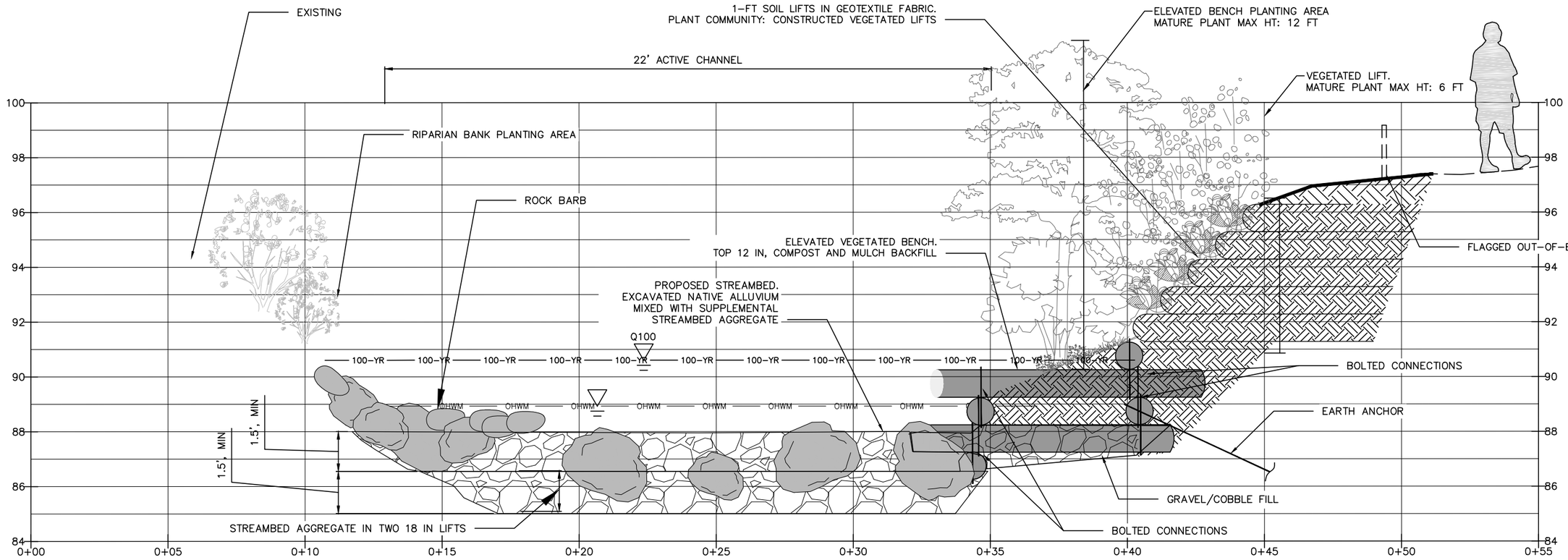
PROFILE WEIRS 8-9

SEC 34 TWP 25N RGE 5E | SHT 14 OF 26



SECTION A–A' 13

HORIZONTAL SCALE IN FEET
2 0 2 4
4 0 2 4
VERTICAL SCALE IN FEET
VERTICAL EXAGGERATION X 1

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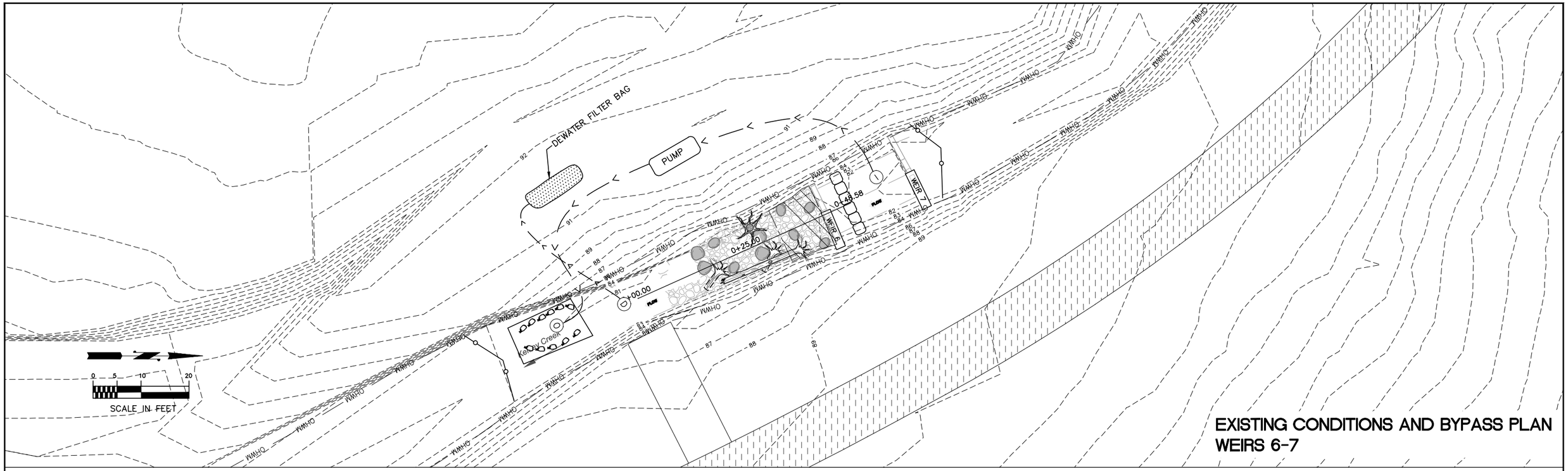
CROSS-SECTION WEIRS 8-9

SEC 34 TWP 25N RGE 5E | SHT 15 OF 26



EXISTING CONDITIONS AND BYPASS PLAN
WEIRS 6-7

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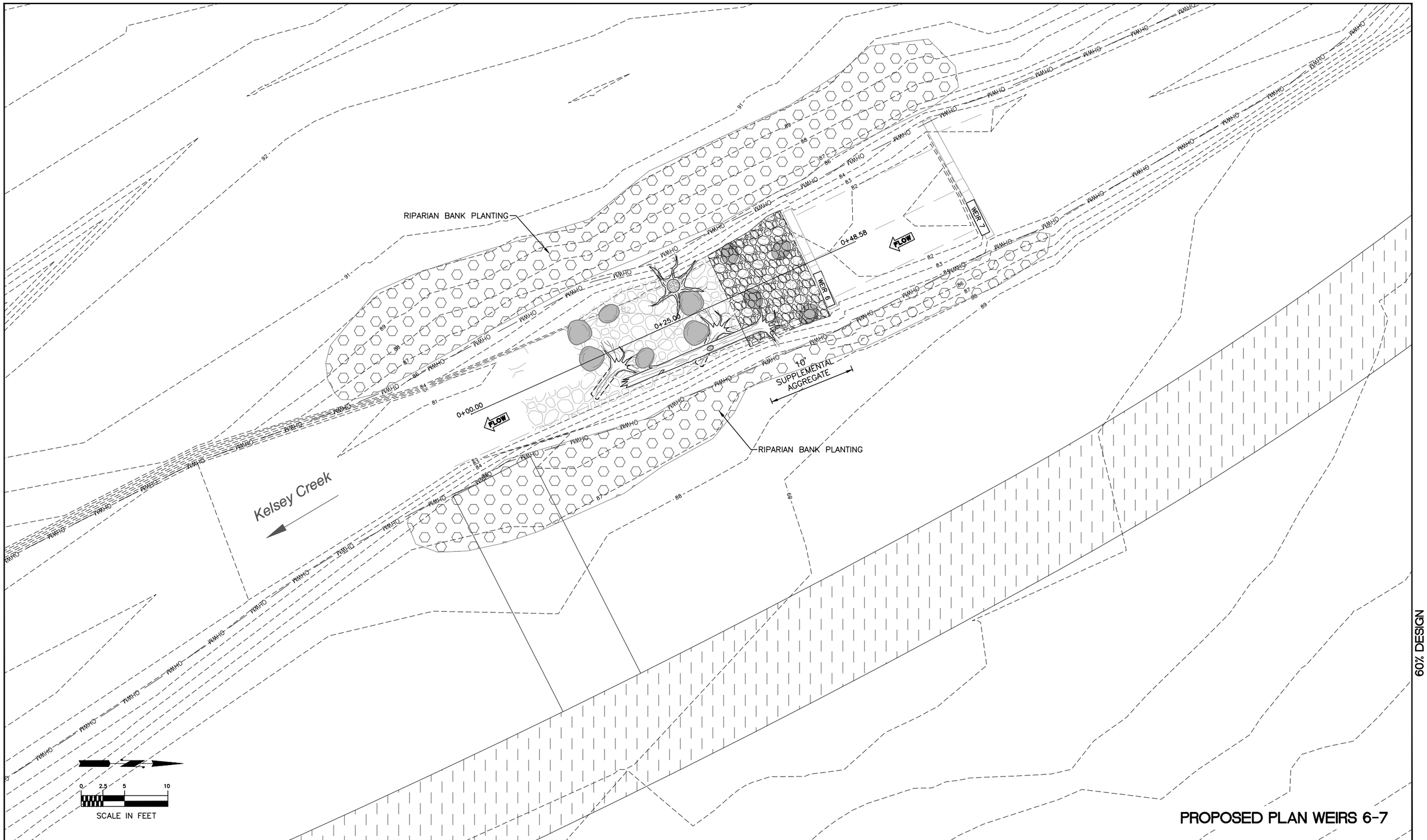
PROPOSED PLAN WEIRS 6-7

SEC 34 TWP 25N RGE 5E | SHT 16 OF 26



PROPOSED PLAN WEIRS 6-7

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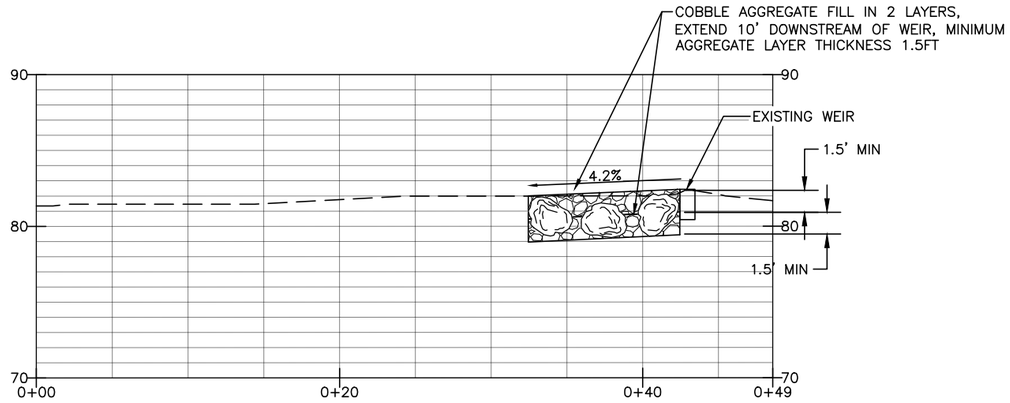
PROPOSED PLAN WEIRS 6-7

SEC 34 TWP 25N RGE 5E | SHT 17 OF 26



HORIZONTAL SCALE IN FEET
5 0 5 10
5 0 5 10
VERTICAL SCALE IN FEET
VERTICAL EXAGGERATION X 1

PROFILE WEIRS 6-7

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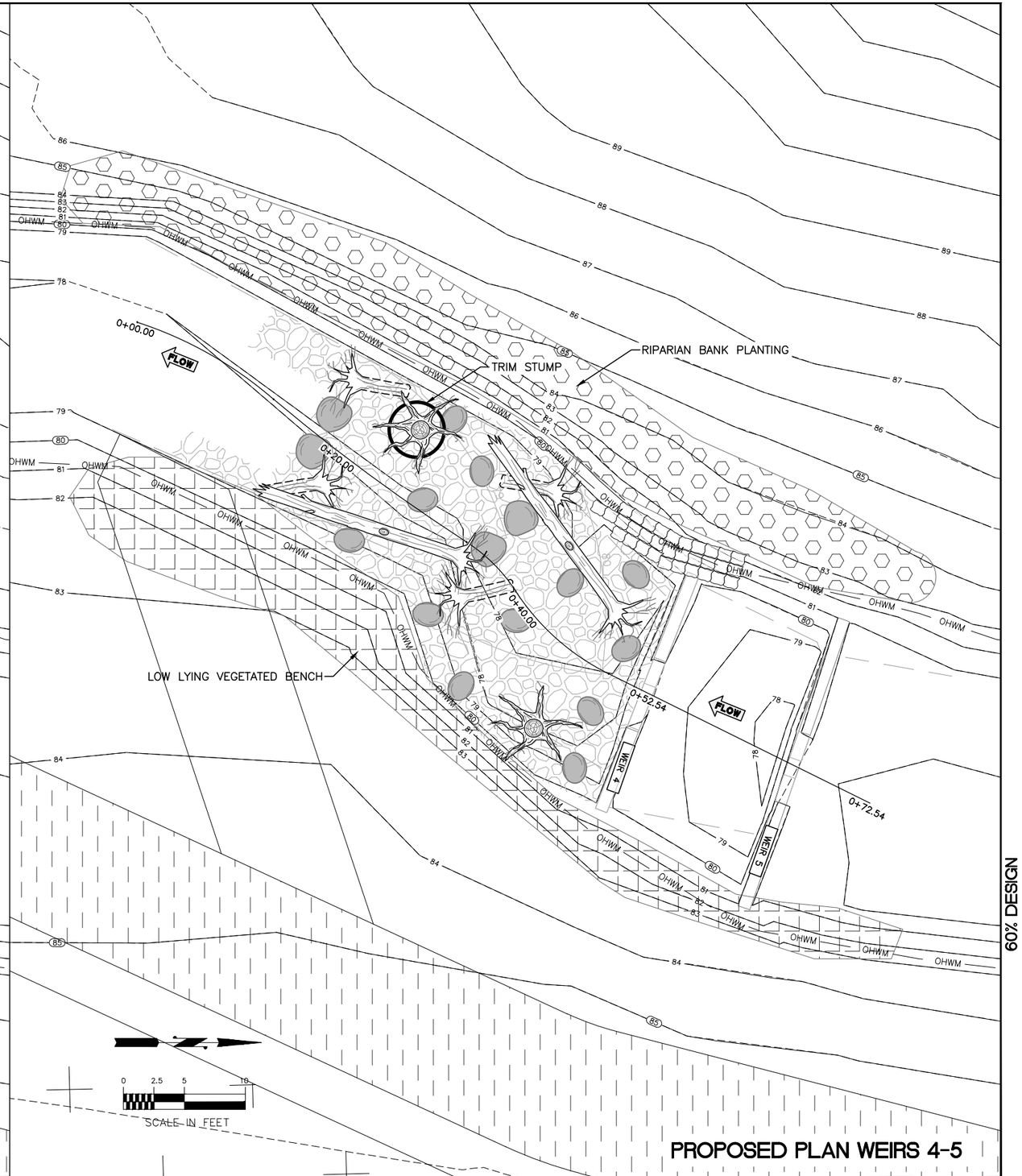
PROFILE WEIRS 6-7

SEC 34 TWP 25N RGE 5E | SHT 18 OF 26

EXISTING PLAN WEIRS 4-5



PROPOSED PLAN WEIRS 4-5

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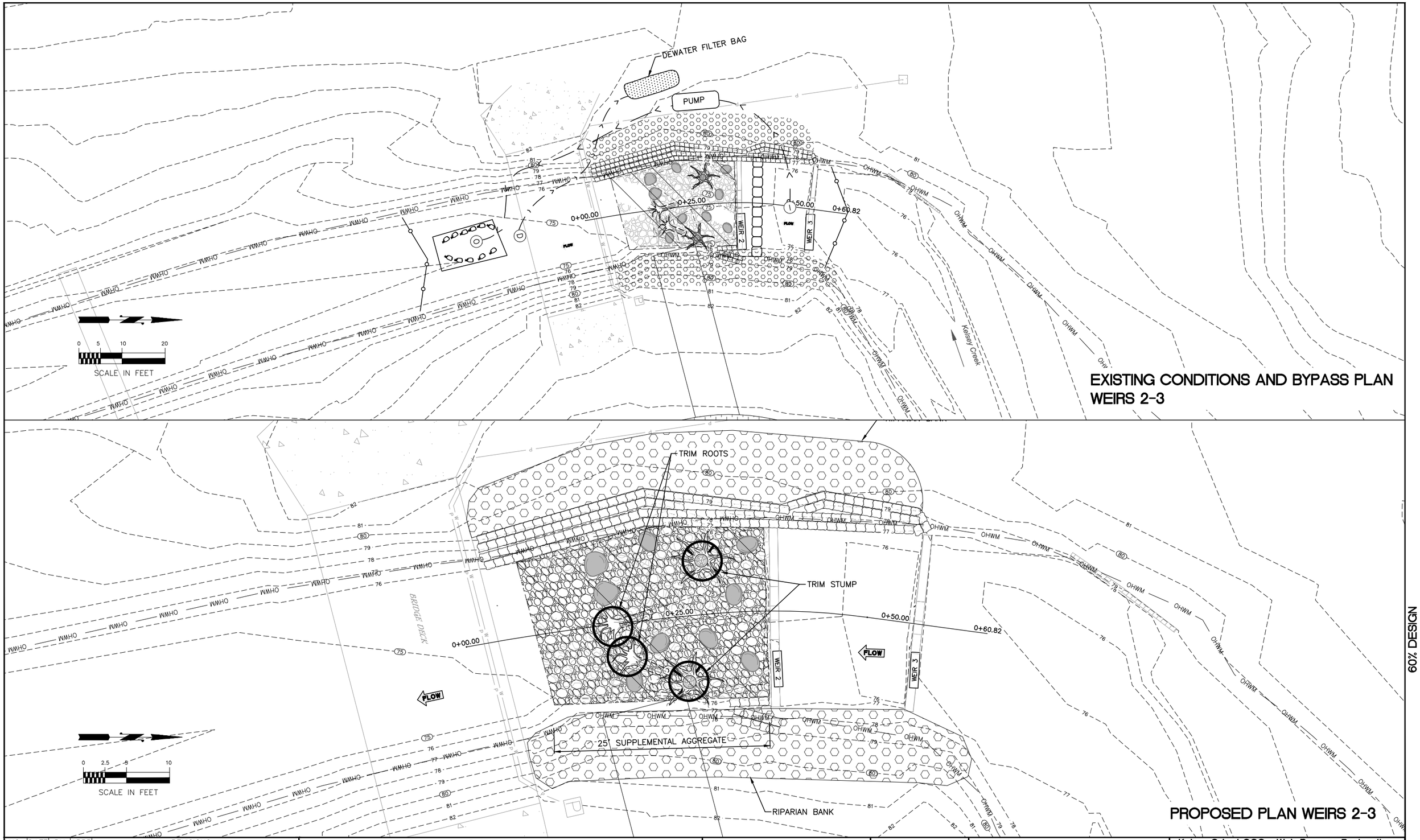
EXISTING + PROPOSED PLAN WEIRS 4-5

SEC 34 TWP 25N RGE 5E | SHT 19 OF 26



EXISTING CONDITIONS AND BYPASS PLAN
WEIRS 2-3

PROPOSED PLAN WEIRS 2-3

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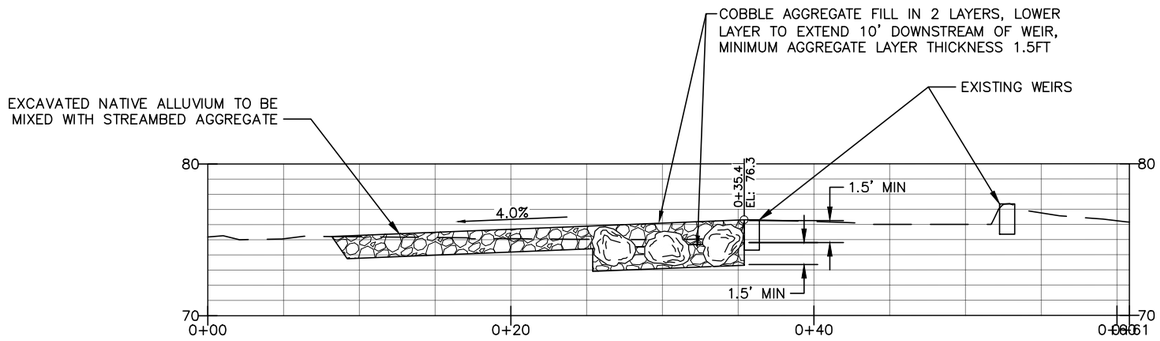
EXISTING + PROPOSED PLAN WEIRS 2-3

SEC 34 TWP 25N RGE 5E | SHT 20 OF 26



HORIZONTAL SCALE IN FEET
5 0 5 10
5 0 5 10
VERTICAL SCALE IN FEET
VERTICAL EXAGGERATION X 1

PROFILE WEIRS 2-3

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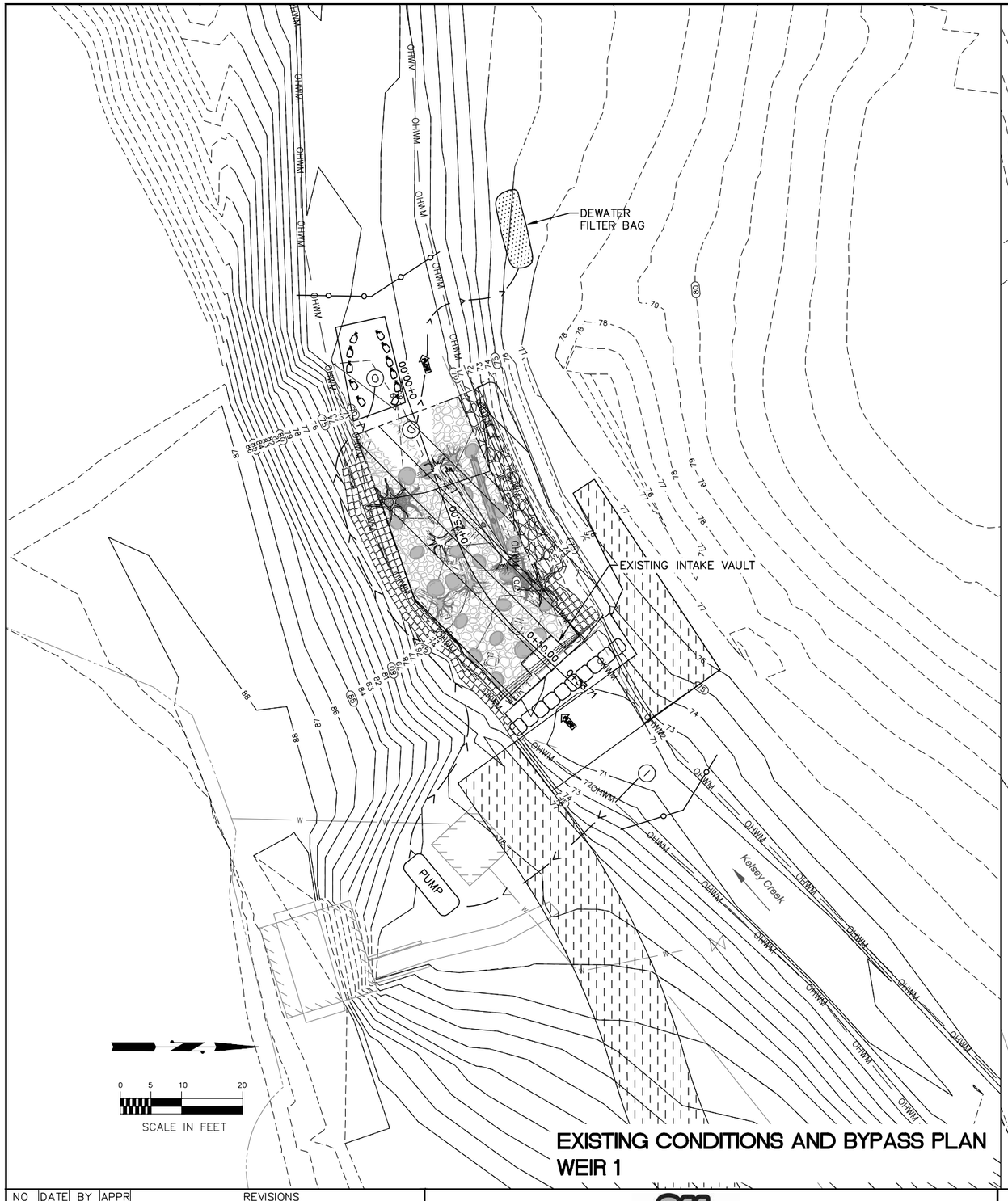
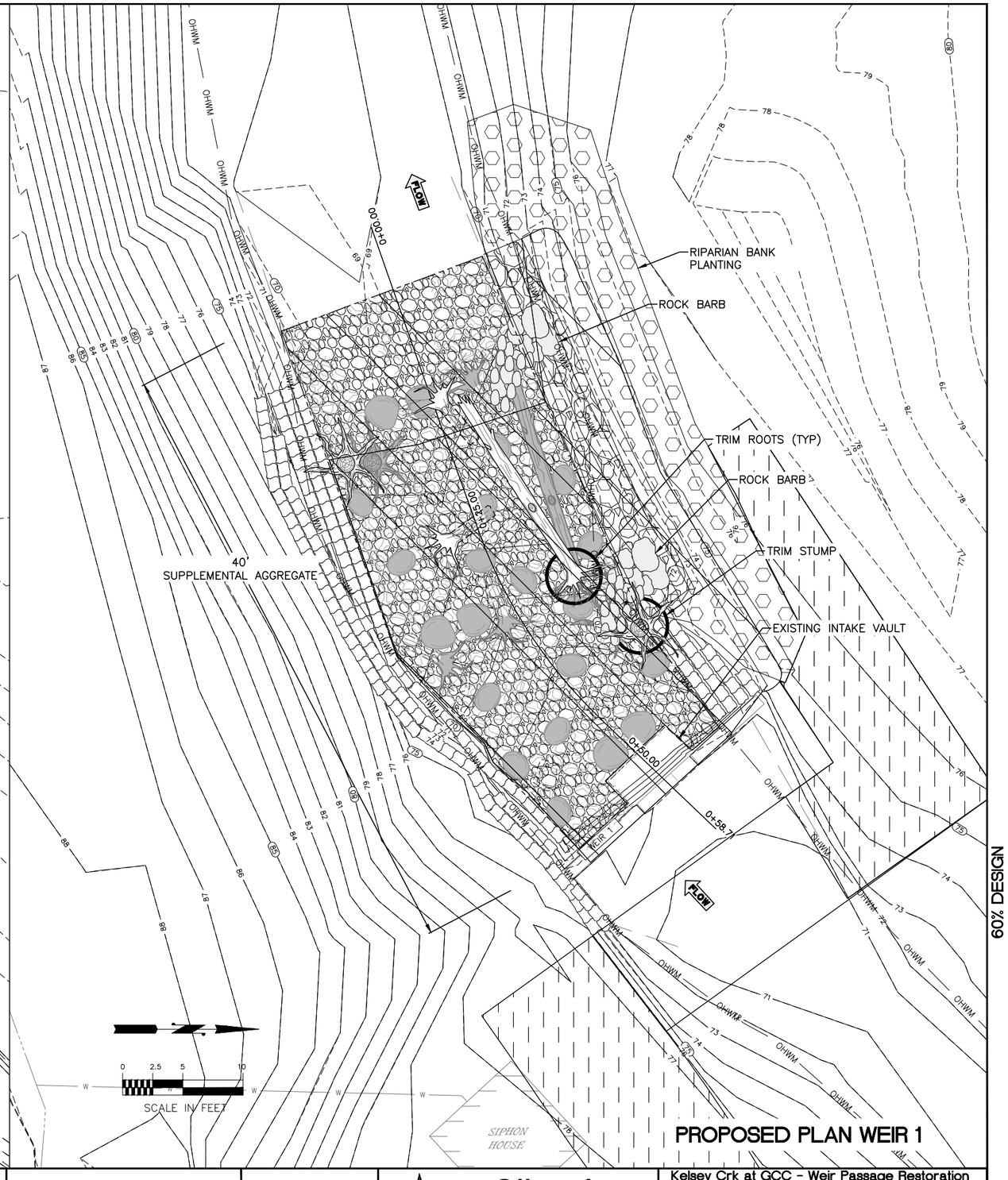
PROFILE WEIRS 2-3

SEC 34 TWP 25N RGE 5E | SHT 21 OF 26



EXISTING CONDITIONS AND BYPASS PLAN
WEIR 1



PROPOSED PLAN WEIR 1

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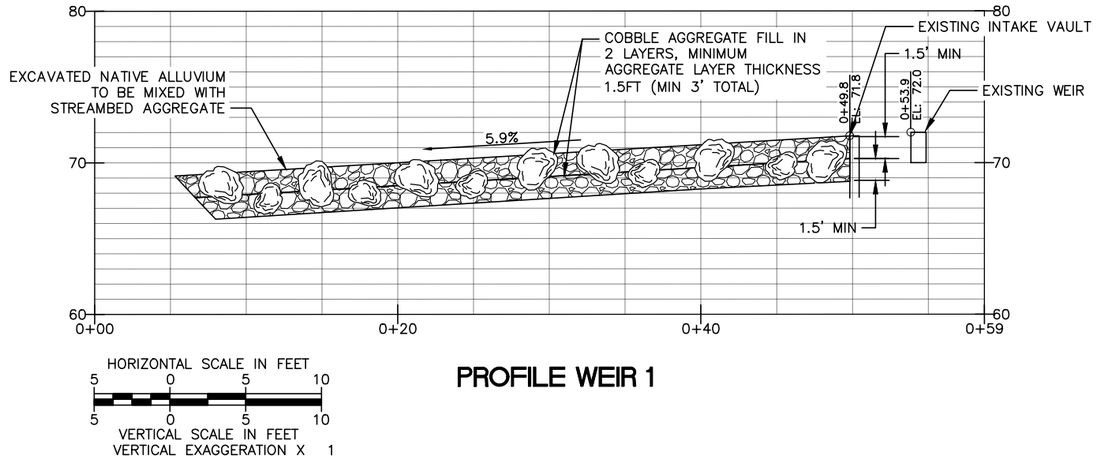
EXISTING + PROPOSED PLAN WEIR 1

SEC 34 TWP 25N RGE 5E | SHT 22 OF 26



HORIZONTAL SCALE IN FEET
5 0 5 10
5 0 5 10
VERTICAL SCALE IN FEET
VERTICAL EXAGGERATION X 1

PROFILE WEIR 1

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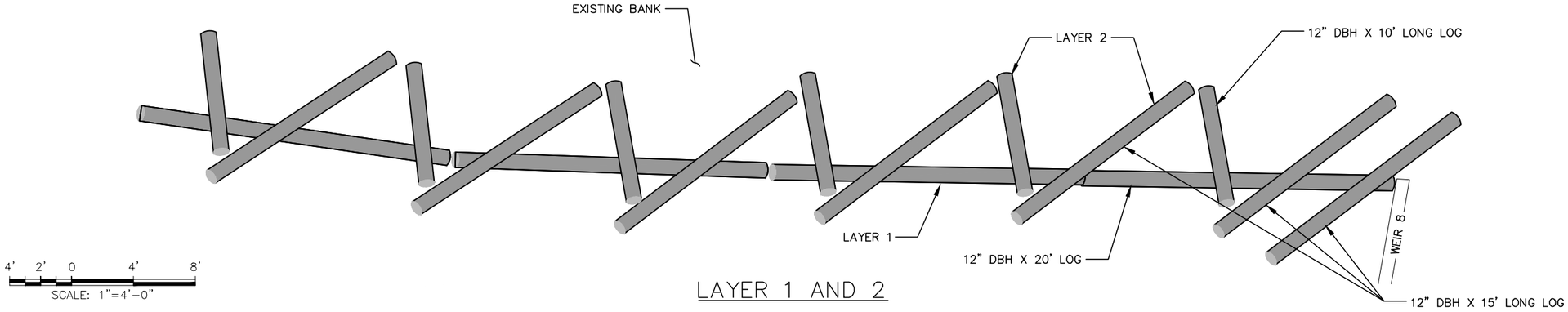
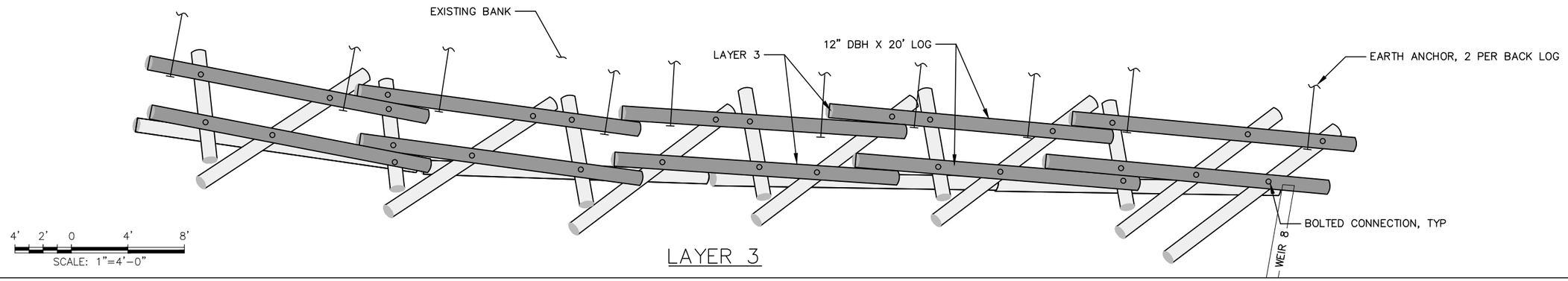
PROFILE WEIR 1

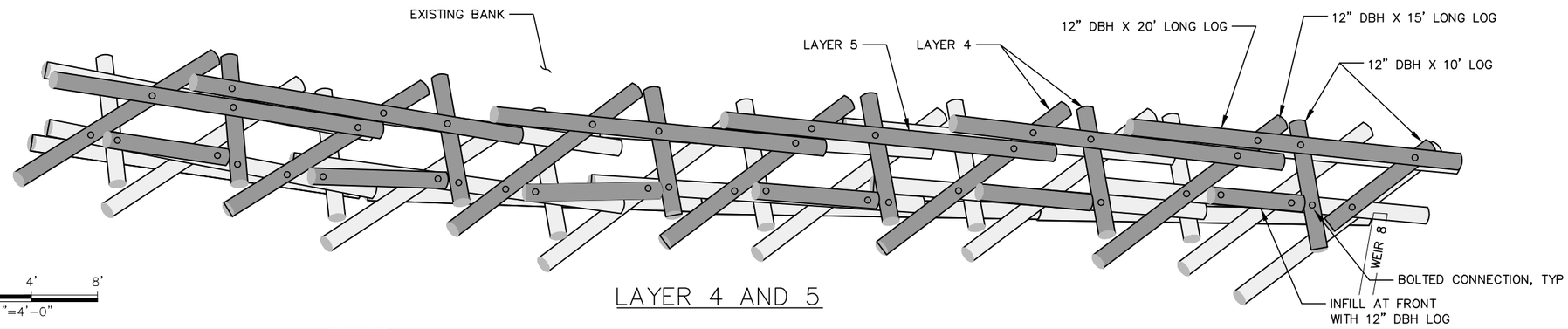
SEC 34 TWP 25N RGE 5E | SHT 23 OF 26



LAYER 1 AND 2



LAYER 3



LAYER 4 AND 5

TIMBER CRIB LAYERING PLAN 1/13

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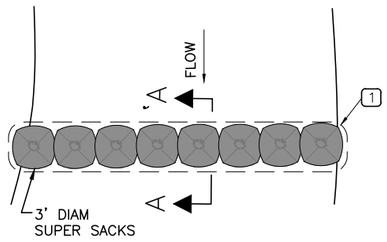
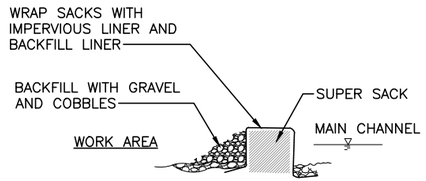
TIMBER CRIB LAYERING PLANS

SEC 34 TWP 25N RGE 5E | SHT 24 OF 26



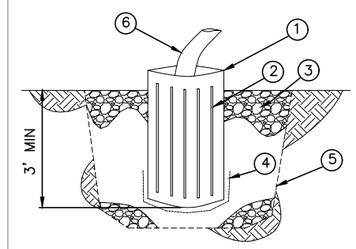
PLAN VIEW

1. WRAP "SUPER SACKS" WITH IMPERVIOUS PLASTIC LINER TO PREVENT SEEPAGE.
2. USE "SUPER SACKS" AS BUTTRESSES AS REQUIRED.



SECTION A–A

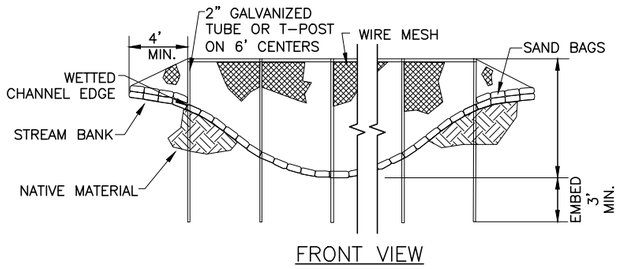
COFFER DAM DETAIL 1/*
SCALE: 1" = 5'



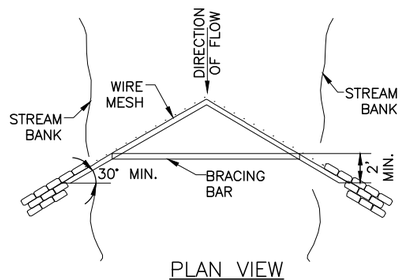
KEY NOTES:

1. CORRUGATED PIPE. 24" MIN DIAMETER.
2. 1/4" SLOTS AT 3" SPACING ALL THE WAY AROUND THE PIPE.
3. STREAMBED GRAVEL.
4. WIRE SCREEN 1/2" MESH, COVERING PIPE BOTTOM, ANCHORED TO PIPE.
5. LIMIT OF EXCAVATION
6. INSTALL ELECTRIC SUBMERSIBLE PUMP, ROUTE DISCHARGE TO APPROVED LOCATION.

SUMP PUMP DETAIL 3/25
NTS



FRONT VIEW

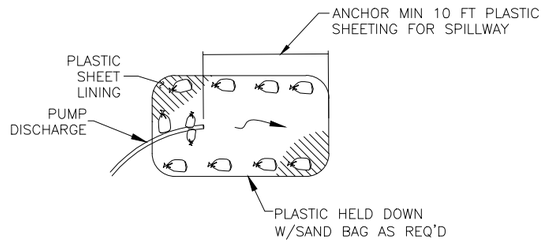


PLAN VIEW

NOTES

1. SECURE NYLON FISH NET TO STREAM BOTTOM WITH SAND BAGS.
2. WIRE MESH WITH 9.5 MM MAXIMUM SCREEN OPENING SIZE (PER WSDOT FISH EXCLUSION PROTOCOLS AND STANDARDS, 2012).
3. BLOCK NET SHALL BE INSTALLED AT AN ANGLE TO THE DIRECTION OF FLOW (NOT PERPENDICULAR TO FLOW).
4. FOLLOWING INSTALLATION OF BLOCK NETS, THE SALVAGE OF FISH BETWEEN THE NETS SHALL BE COMPLETED BY QUALIFIED STAFF APPROVED BY THE OWNER.

BLOCK NET DETAIL 2/*
NTS



PUMP OUTLET DETAIL 4/25
NTS

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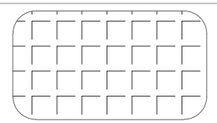
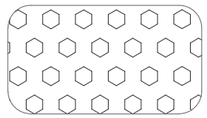
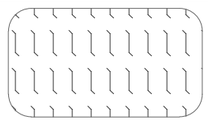
LEGEND AND CONTROL

SEC 34 TWP 25N RGE 5E | SHT 25 OF 26

PLANT COMMUNITY	LOCATION, SIZE (square feet, sf)	SPECIES	SCIENTIFIC NAME	STOCK TYPE	QUANTITY	DENSITY	MATURE HEIGHT (FT)	SOIL AND MOISTURE ASSUMPTIONS	NOTES
Low-lying vegetated bench Q2-Q5	Weir 12-13, 500 sf							Wet. Organics over gravels	May be extended up the slope at this site.
Assumed 30' veg max height (e.g. weir 12-13)	Weir 4-5, 400 sf	Vine maple	Acer circinatum	2 gallon	31	in clusters of 3, clusters spaced 12' apart	20		
		Red-twig dogwood	Cornus sericea	1-2 gallon	31	in clusters of 3-5, clusters spaced 12' apart	15		rhizomatous
		Black twinberry	Lonicera involucrata	1-2 gallon	31	in clusters of 3-5, clusters spaced 12' apart	7		
		Sweet gale	Myrica gale	1-2 gallon	31	in clusters of 3, clusters spaced 12' apart	5		
		Pacific ninebark	Physocarpus capitatus	2 gallon	17		12		
Elevated vegetated bench: Q100	Weir 8-9, 300 sf							Imported topsoil, irrigated	
assumed 10' veg max height (e.g. weir 8-9)		Ocean spray	Holodiscus discolor	2 gallon	2	in clusters of 2, clusters spaced 12' apart	12		
		Sweet gale	Myrica gale	1-2 gallon	5	in clusters of 3, clusters spaced 12' apart	5		
		Nootka rose	Rosa nutkana	1-2 gallon	8	in clusters of 3-5, clusters spaced 12' apart	8		rhizomatous
		Snowberry	Symphoricarpus albus	1-2 gallon	8	in clusters of 3-5, clusters spaced 12' apart	5		rhizomatous
		Hydroseed w/ native mix							
Riparian bank (various Q's)	Weir 12-13, 600 sf							Native, organic over mineral, irrigated	
Assumed 12' veg max height	Weir 8-9, 1400 sf	Red twig dogwood	Cornus sericea	stakes below Q5	20	in clusters of 3-5, clusters spaced 12' apart	15		rhizomatous
taller shrubs towards lower slope, shorter towards upper slope (e.g. weir 8-9)	Weir 4-5, 500 sf	Red twig dogwood	Cornus sericea	1-2 gallon	20	in clusters of 3-5, clusters spaced 12' apart	15		rhizomatous
	Weir 6-7, 1060 sf	Ocean spray	Holodiscus discolor	2 gallon	17	in clusters of 2, clusters spaced 12' apart	12		
		Black twinberry	Lonicera involucrata	1-2 gallon	38	in clusters of 3-5, clusters spaced 12' apart	7		
		Nootka rose	Rosa nutkana	1-2 gallon	38	in clusters of 3-5, clusters spaced 12' apart	6		rhizomatous
		Snowberry	Symphoricarpus albus	1-2 gallon	38	in clusters of 3-5, clusters spaced 12' apart	5		rhizomatous
		Hydroseed w/ native mix							
Constructed vegetated banks (lifts, above Q100)	Weir 8-9, 890 sf							Imported topsoil, irrigated	
assumed 6' veg max height (e.g. weir 8-9)	Weir 2-3, 1100 sf	Tall Oregon grape	Mahonia aquifolium	1 gallon	71	in clusters of 3-5, clusters spaced 12' apart	6		
	Weir 1, 520 sf	Nootka rose	Rosa nutkana	1-2 gallon	71	in clusters of 3-5, clusters spaced 12' apart	6		rhizomatous
		Thimbleberry	Rubus parviflorus	1-2 gallon	71	in clusters of 3-5, clusters spaced 12' apart	6		rhizomatous
		Snowberry	Symphoricarpus albus	1-2 gallon	71	in clusters of 3-5, clusters spaced 12' apart	5		rhizomatous
		Hydroseed w/ native mix							
Hydroseed Only	Weir 8-9, 200 sf								
	Access Road, 30,000 sf								

GENERAL PLANTING NOTES:
1. INVASIVE SPECIES SHALL BE SELECTIVELY REMOVED FROM ALL PLANTING AREAS PRIOR TO PLANTING. CLEARING AND GRUBBING OF ANY AREA SHALL BE PERFORMED ONLY WITH APPROVAL OF THE SITE ENGINEER.

60% DESIGN

NO	DATE	BY	APPR	REVISIONS

Natural Systems Design
P.O. Box 15609
Seattle, WA 98115

811 Know what's below. Call before you dig.

M. HRACHOVEC — DESIGNED BY — DATE
G. MATSUMOTO — DRAWN BY — DATE
M. HRACHOVEC — CHECKED BY — DATE

City of Bellevue
UTILITIES

Kelsey Crk at GCC - Weir Passage Restoration and Stabilization

PLANTING DETAILS

SEC 34 TWP 25N RGE 5E | SHT 26 OF 26